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AVAILABLE FROM Requests for materials should be sent to the appropriate State source

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ABSTRACT

This annotated listing of curriculum materials for Agriculture provides planners, administrators, vocational educators, and others with information as to available curriculum materials developed by the various States. The materials are identified with the instructional titles and codes from the classification system of the Office of Education, which are refined to include one or more related subtitles with appropriate codes. The curriculum materials in this listing concern the following subject areas: Agricultural Production; Agricultural Supplies/Services; Agricultural Mechanics; Agricultural Products; Ornamental Horticulture; Agricultural Resources; and Agriculture, Other. Occupational resource material that applies to all vocational areas is listed under Administrator's, Student's, or Teacher's Resource. Instructions for ordering are given. (For related documents, see ED 057 268, 270-274.)

ED 057 269

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Office of Education
Bureau of Adult, Vocational and Technical Education
Division of Vocational and Technical Education

CURRICULUM MATERIALS FOR AGRICULTURE

Annotated listing of materials available from public education agencies

Separate listings in the following areas are available upon request:

Distributive Education	Office Occupations
Health Occupations Education	Technical Education
Home Economics	Trade and Industrial Occupations

Requests for materials should be sent to the appropriate State source.

For additional information contact:

William Berndt, Education Program Specialist
Ancillary Services Branch - Curriculum Development
Division of Vocational and Technical Education
U.S. Office of Education
Washington, D.C. 20202

71(A)

EXPLANATION OF CODING SYSTEM

In recent years it has become apparent that a strong relationship exists between the world of education and the world of work. Emphasis is on the concept that the development of our human resources is vital to the well-being and growth of our society. In order to implement this belief, leaders in all fields have focused their attention on education and especially on vocational education.

This annotated listing of curriculum materials is provided in order to apprise planners, administrators, vocational educators, and others interested in offering or involved in vocational education programs of the available curriculum materials developed by the various States.

The curriculum materials have been identified with the instructional titles and codes from the classification system of the Office of Education. These titles and codes link vocational education programs to occupations. Utilizing the codes in this listing relates the curriculum materials to the instructional program. Seven major vocational education areas are identified in separate listings and coded as follows:

01 Agriculture	09 Home Economics
04 Distributive Education	14 Office Occupations
07 Health Occupations Education	16 Technical Education
17 Trade and Industrial Occupations	

The items are refined to include one or more related subitems as indicated in the following example:

First 2-digit position: subject matter area
Example: 14 OFFICE OCCUPATIONS

Second 2-digit position: principal segment of subject matter
Example: 14.02 BUSINESS DATA PROCESSING SYSTEMS OCCUPATIONS

Third 2-digit position: division of principal segment
Example: 14.0202 PERIPHERAL EQUIPMENT OPERATORS

Fourth 2-digit position: first level detail of division of principal segment
Example: 14.020201 KEY PUNCH AND CODING EQUIPMENT OPERATORS

The coding system is contained in:

U.S. Department of Health, Education, and Welfare, Office of Education. Vocational Education and Occupations (OE-80061). Washington: U.S. Government Printing Office, July 1969.

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01. AGRICULTURE

Publications marked (Cooperative Training) in the title or supportive statement are designed for use in cooperative education programs.

AGRICULTURAL PRODUCTION: 01.01

Animal Science: 01.0101

ILLINOIS

Animal Science Transparencies. 1970, \$1.80.

This is a set of 34 transparencies on animal science (26 on cattle, 5 on horses, 1 on sheep and 2 on general livestock). This series was prepared from materials developed by Vocational Agriculture Services, Texas A&M University; Agr. Ed. Dept. Subject Matter Service, Mississippi State University; Hoards Dairyman; and The American Hereford Association.

Beef--(Animal Science Visuals). 1968, \$.65.

This is a set of 18 visuals on ideal type, parts of the animal, reproductive organs, and digestive system.

Blocking and Trimming Sheep (Slidefilm 144). 1970, \$2.85.

This is a color, single-frame slidefilm of 42 frames. It shows the equipment needed and step-by-step operation when blocking and trimming sheep for show.

Blocking and Trimming Sheep. 1970, \$1.65.

This is a set of 31 transparencies illustrating the step-by-step operation of blocking and trimming sheep for show.

Breeds of Swine (Slidefilm 144A). 1970, \$3.15.

This is a color, single-frame slidefilm of 52 frames. It briefly describes nine breeds common to this country.

Caring for the Brood Mare and Foal. Student's Guide, 1967, 8 pages, \$.10, Offset.

The guide presents information about breeding habits of the mare, the care of the mare and foal, and similar material of interest to breeders.

Caring for the Sow and Litter at Farrowing Time. Student's Guide, 1964, 8 pages, \$.10, Offset.

This well-illustrated leaflet provides much helpful information in answer to the question: How to prepare the farrowing unit, and other topics of interest to those in the hog business.

Choosing the Livestock System. Student's Guide, 1965, 8 pages, \$.10, Offset.

The guide helps the farmer determine the economics of certain livestock combinations as revenue producing agents and the alternatives available to him.

The Cow's Udder and How It Functions (Slidefilm 208A). 1968, \$3.05.

This is a color, single-frame slidefilm of 52 frames. It illustrates and explains the functions of the various parts of the cow's udder, explains how the cow lets down her milk, and what happens to milk letdown when a cow is frightened or injured.

Dairy Cattle Feeding. Student's Guide, 1968, 12 pages, \$.15, Offset.

The leaflet points out that in addition to good feeding, other management practices are necessary to obtain the best results from the dairy herd. These other management practices are included in the publication along with the nutrients making up good dairy cattle feed.

Dairy--(Dairy Science Visuals). 1968, \$.60.

This is a set of 16 visuals on dairy type, reproduction, and digestive system.

Fitting Livestock to the Farm. Student's Guide, 1965, 12 pages, \$.15, Offset.

The leaflet explores the problem of fitting livestock to the farm and all its resources. It covers the functions livestock perform for the total economy as well as for the individual farmer.

Judging Beef Cattle, Swine, and Sheep. Student's Guide, 1969, 21 pages, \$.25, Offset.

The guide, through pictures and explanatory material, provides information helpful in judging state and/or national contests. Included are points to consider in developing a sound judging system.

Judging Dairy Cattle. Student's Guide, 1969, 14 pages, \$.20, Offset.

This guide provides the basic information for judging dairy cattle. It is well illustrated and contains a dairy cow score card that is very helpful to the amateur judge. The card emphasizes general appearance, dairy character, body capacity, and mammary system of the animal.

Judging and Grading Poultry and Eggs. Student's Guide, 1967, 36 pages, \$.35, Offset.

In becoming a good judge of poultry, a first step is to learn the names of the important parts of a chicken. This guide, which is well illustrated, provides this and other information helpful to the contest judge. Points to consider are carefully summarized for judging birds when egg production and other qualities of interest to the poultryman are being evaluated.

Managing the Beef Breeding Herd. Student's Guide, 1969, 16 pages, \$.20, Offset.

The content provides information on care of the breeding herd, care of the cow at calving time, care of calves and feeds to use.

Meat--(Animal Science Visuals). 1967, \$.70.

This is a set of 19 visuals on carcass bone structure, wholesale-retail cut charts, and identification features of arm steaks, rib steaks, blade steaks, T-bones, sirloins, and round steaks.

Plan the Livestock System and Estimate Fertility Costs (Slidefilm 372). 1968, \$3.05.

This is a color, single-frame slidefilm of 48 frames. It discusses the fitting of livestock to various resources: land, feed, other capital, labor, and management. Estimates fertility costs by a shortcut method.

Preventing Transportation Losses of Livestock (Slidefilm 186A). 1968, \$2.55.

This is a color, single-frame slidefilm of 33 frames. It uses cartoons to show the causes and means of preventing bruises on livestock.

Selecting Beef Breeding Animals (Slidefilm 100A). 1970, \$3.90.

This is a color, single-frame slidefilm of 73 frames. It illustrates factors to keep in mind when selecting beef breeding animals.

Selecting Breeding Hogs (Slidefilm 166-64). 1964, \$1.50.

This is a black and white, single-frame slidefilm of 74 frames. It shows the parts of a hog and points to look for when selecting sows, boars, and young stock for the breeding herd.

Selecting Breeding Sheep (Slidefilm 143A). 1968, \$3.80.

This is a color, single-frame slidefilm of 72 frames. It discusses and illustrates the anatomy of sheep and their desirable characteristics. It explains how to select sheep by producing ability.

Selecting, Feeding and Caring for Light Horses. Student's Guide, 1967, 16 pages, \$.20, Offset.

Contents describe breeds of light horses and their characteristics, what to look for in selecting light horses, how to feed them, what care is needed, and the buildings and equipment suitable for light horses.

Shearing Sheep (Slidefilm 141A). 1970, \$3.85.

This is a color, single-frame slidefilm of 73 frames. It illustrates the step-by-step operation of shearing sheep.

Sheep--(Animal Science Visuals). 1967, \$.30.

This is a set of 7 visuals on parts of a sheep and wholesale cuts of a lamb carcass.

Swine--(Animal Science Visuals). 1968, \$.95.

This is a set of 28 visuals on parts of a hog, wholesale cuts, and life cycles of a number of internal parasites.

Systems of Swine Breeding. Student's Guide, 1965, 8 pages, \$.10, Offset.

The leaflet describes the process of reproduction and causes of variation in offspring. Breeding systems are discussed and the effects of crossbreeding in swine are treated in some detail.

LOUISIANA

Livestock and Poultry - A Training Program for Vocational Agriculture. Instructor's Guide, 1966, 118 pages, \$2.00, Offset.

Developed for use by high school instructors of Livestock and Poultry farming. The guide contains 16 units of instruction together with lessons dealing with the maintenance of the necessary electrical and mechanical equipment, marketing, processing, and distribution; including meats, milk, eggs, and the like. It also contains references.

MISSISSIPPI

A Reference Unit on Basic Principles of Animal Science. Instructor's Guide, 1965, 46 pages, \$1.00, Offset.

The manual is designed to provide teachers and students with a comprehensive view of the basic principles of animal science. It contains five units covering anatomy and physiology, nutrition, environmental factors, diseases, and parasites of farm animals.

OHIO

Dairy Cattle Sterility. Slides, 1965, \$6.50.

A series of 45 color slides and script. The slides illustrate both normal and abnormal conditions in the male and female reproductive tracts. The series is organized into lessons which correspond to the lessons in Hoard's Dairyman book "Dairy Cattle Sterility."

Gestation Location Management of Sows and Gilts. Slides, 1966, \$3.75.

A series of 23 color slides and script which considers both feed and management suggestions. Both animated drawings and actual pictures are used.

Livestock Breeding. Instructor's Manual, 1970, 194 pages, \$2.00, Offset.

May be used as a student's reference. Presents information which applies to all species of livestock breeding. Content is divided into 13 chapters. Problems and exercises are included. A bibliography is also included.

Livestock Marketing. Instructor's Manual, 1966, 128 pages, \$1.75, Offset.

A unit of instruction divided into a 30-point lesson outline. Prepared to assist the teacher in developing students' understanding of elementary procedures used in the marketing process.

PENNSYLVANIA

Beef Marketing. Teacher's Guide, 1965, 24 pages, \$.40, Offset.

For use with classes in the secondary school and adult programs. Content consists of a teacher's unit plan and four units of instruction under titles of problem areas. A sample examination together with a key is included.

_____. Student's Handbook, 1965, 66 pages, \$1.25, Offset.

TEXAS

Veterinary Assistant. Course of Study, 1967, 467 pages, \$5.50, Offset.

Designed for the student enrolled in Agricultural Cooperative Part-time Training Program. Content consists of 15 units of instruction subdivided into 89 topics. The topic materials are organized as assignment sheets, information sheets and topic test sheets. Answer sheets are provided for questions and problems listed on assignment and topic test sheets. References are included.

Plant Science: 01.0102

ILLINOIS

Control of Aquatic Weeds (Slidefilm 795). 1966, \$2.90.

This is a color, single-frame slidefilm of 43 frames. It shows growth habits, identifying characteristics, and lists chemical control measures of the common weeds found in farm ponds and streams.

Controlling Giant Foxtails (Slidefilm 794). 1965, \$2.70.

This is a color, single-frame slidefilm of 37 frames. It discusses the growth habits, cultural and chemical control of Giant Foxtail.

Corn Diseases in Illinois (Slidefilm 732). 1965, \$3.05.

This is a color, single-frame slidefilm of 48 frames. It shows typical symptoms of some of the common diseases which attack corn. A few of the major headings are: Leaf Blights, Storage Rots, Rusts, Stewart's Disease, Stalk Rots, Ear Rots, Smuts, and Corn Dwarf Mosaic.

Determining Market Grades of Corn (Slidefilm 733). 1969, \$3.00.

This is a color, single-frame slidefilm of 47 frames. It discusses various factors and standards used to determine market grades of shelled corn. It shows the step-by-step procedure of obtaining the sample, making the test weight, making the moisture test, and conducting a detailed analysis of the sample.

Factors Affecting Classes and Grades of Oats (Slidefilm 772). 1969, \$2.85.

This is a color, single-frame slidefilm of 42 frames. It discusses the various classes and grades of oats and shows the damaged kernels that affect market grades.

Factors Affecting Classes and Grades of Shelled Corn (Slidefilm 734). 1969, \$2.85.

This is a color, single-frame slidefilm of 42 frames. It discusses various classes and grades of shelled corn and shows damaged kernels that affect market grades.

Factors Affecting Classes and Grades of Soybeans (Slidefilm 746). 1970, \$2.60.

This is a color, single-frame slidefilm of 34 frames. It discusses the various classes and grades of soybeans and shows damaged seeds that affect market grades.

Factors Affecting Classes and Grades of Wheat (Slidefilm 776). 1969, \$3.20.

This is a color, single-frame slidefilm of 53 frames. It discusses various classes and grades of wheat and shows the damaged kernels that affect market grades.

Identification of Weed Seedlings, Broadleaves - Part I (Slidefilm 800). 1970, \$2.95

This is a color, single-frame slidefilm of 45 frames. It shows the emerging seedling, identifying characteristics of the emerging seedlings and also shows the material plant. Ten common weeds are shown.

Identification of Weed Seedlings, Broadleaves - Part II (Slidefilm 801). 1970, \$2.95.

This is a color, single-frame slidefilm of 45 frames. It shows the emerging seedling, identifying characteristics of the emerging seedlings and also shows the material plant. Ten common weeds are shown.

Identification of Weeds, Part I (Slidefilm 791). 1964, \$2.80.

This is a color, single-frame slidefilm of 40 frames. It shows all of the weeds included in the Illinois State Judging Contest Rules. It includes leaf and floral characteristics used for identification purposes.

Identification of Weeds, Part II (Slidefilm 792). 1965, \$2.35.

This is a color, single-frame slidefilm of 26 frames. It shows 20 weeds which are common problems in growing crops. It includes leaf and floral characteristics used for identification purposes.

Maize Dwarf Mosaic of Corn. Student's Guide, 1965, 8 pages, \$.10, Offset.

Content examines symptoms, spreading, location of disease, damage done by it, and control of maize dwarf mosaic diseases in corn.

Oat Production--(Plant and Soil Science Visuals). 1969, \$.55.

This set of 16 visual masters was produced cooperatively with the Quaker Oats Company, Chicago, Illinois. The text discusses possible factors you should consider for profitable oat production.

Producing High Alfalfa Yields. Student's Guide, 1967, 20 pages, \$.20, Offset.

Soil requirements, varieties, seed purchasing considerations, establishing the crop stand, harvesting, diseases and other aspects of raising alfalfa are covered in this guide.

Producing High Corn Yields. Student's Guide, 1967, 12 pages, \$.15, Offset.

High corn yields have done much in recent years to add to farm income. This guide provides information on how to secure maximum crop yields from corn planting.

Producing Hybrid Seed Corn (Slidefilm 730A). 1968, \$3.65.

This is a color, single-frame slidefilm of 68 frames. It discusses various facts about hybrid seed corn and how it is produced.

Producing Oats. Student's Guide, 1964, 12 pages, \$.15, Offset.

The guide points out the variety of spring oats to plant, recommended growing practices for spring oats, and the diseases that attack oats.

Producing Plants by Asexual Propagation. Student's Guide, 1968, 20 pages, \$.25, Offset.

Production of a new plant from a growing part of a parent plant is identified as asexual propagation. The guide deals with propagating new plants, use of rooting media, placing cuttings, and plant grafting.

Propagation By Air Layering (Slidefilm 600). 1968, \$2.45.

This is a color, single-frame slidefilm of 29 frames. Air layering is a common method used in horticulture to produce new plants from a stem or branch which remains in position on the parent plant while rooting. It is used to increase choice shrubs, trees, and plants which are difficult to root by cuttings or other means.

Pruning and Training Bramble Fruits and Highbush Blueberries. Student's Guide, 1965, 8 pages, \$.10, Offset.

Content of the guide provides information on the growth and fruiting habits of bramble fruit bushes.

Soybean Diseases in Illinois (Slidefilm 747). 1970, \$2.75.

This is a color, single-frame slidefilm of 39 frames. It discusses the common soybean diseases and pictures the common symptoms as they occur in plants.

Weed Identification--(Plant and Soil Science Visuals).
1966, \$.95.

This is a set of 33 visual masters on identification of some of the common weeds found in field crops. It discusses some of the various parts used in identification.

LOUISIANA

A Suggested Training Guide for Sweet Potato Production in Louisiana. Training Guide, 1967, 87 pages, \$2.00, Offset.

Designed for advanced high school students in production agriculture. It is organized into eight units of instruction, together with lessons within each unit structured for each area. It covers planting, care, harvesting, curing, and marketing of sweet potatoes.

MISSISSIPPI

A Reference Unit on Basic Principles of Plant Science. Instructor's Guide, 1965, 46 pages, \$1.25, Offset.

The manual is designed to provide teachers and students with a comprehensive view of the basic principles of plant science. It contains eight units covering classification, growth, nutrition, insects and disease, and weed science.

A Reference Unit on Corn. Instructor's Guide, 1966, 143 pages, \$1.25, Offset.

The manual is designed to provide teachers and students with a comprehensive view of the corn enterprise in Mississippi from seeds to yields and profits. It contains 14 chapters covering the step-by-step sequence of corn production and marketing and a bibliography.

A Reference Unit on Vegetable Production. Teacher's Guide, 1969, 69 pages, \$1.50, Offset.

The guide is intended to provide students and teacher with a comprehensive view of the area of vegetable production. There are 16 jobs defined, including selecting the kind of vegetables to produce, securing good seed, planting, fertilizing, irrigating, mulching and rotating, and similar pertinent tasks.

OHIO

An Aid to the Identification of 70 Crop and Weed Plants. Student's Resource Guide, 1971, 36 pages, \$.75, Offset.

A resource manual for teacher and student reference. Contains a brief description and illustration of the plants included in the Ohio agronomy and horticulture contests.

Corn Root Development. Slides, 1964, \$5.50.

A series of 21 color slides with script showing the extent of corn root development at different stages of plant growth from the seedling stage to maturity.

Efficient Machine Harvesting. Slides, 1965, \$3.50.

A series of 21 color slides concerned with corn harvesting losses. The Ohio Extension Service publication "MM 268 Machine Losses - Corn" should be used as teacher reference in connection with showing these slides.

Fundamentals of Plant Identification. Slides, 1971, \$2.60.

A series of 15 color slides and script which illustrate, by means of sketches, the important identifying characteristics of plants. The student work sheets of the same title should be used with these slides.

Fundamentals of Plant Identification. Student's Study Guide, 1971, 16 pages, \$.15, Offset.

A set of student work sheets designed to familiarize students with identifying characteristics of plants. A key to questions is included.

Maize Dwarf Mosaic. Slides, 1965, \$4.80.

A series of 24 color slides and script showing how to identify the disease, how it spreads and the available control measures. A copy of Ohio Bulletin 460 "Maize Dwarf Mosaic" should be used as an additional reference source by the teacher.

Rate of Corn Planting. Teacher's Guide, 1963, 31 pages, \$.50, Offset.

A laboratory exercise designed for use with a corn planting unit in the shop to check plate selection and accuracy of drop of different speeds of operation. Information concerning the most effective rate to plant corn is included.

Some Identifying Characteristics of 52 Ohio Seeds. Resource Guide, 1965, 16 pages, \$.80, Offset.

A resource manual for teacher and student reference. Contains a brief description and illustration of the seeds included in the Ohio agronomy contest.

Some Identifying Characteristics of 70 Plants. Slides, 1971, \$12.90.

A series of 78 color slides with script to accompany the publication "An Aid to the Identification of 70 Crop and Weed Plants." Includes overall views of plants as well as close-ups of important details.

Farm Mechanics: 01.0103

OHIO

Combines and Combining. Student's Manual, 1965, 82 pages, \$.75, Offset.

Subject matter is divided into the following areas: (1) What is the value of doing a good job of combining; (2) The basic design of the combine; (3) The operation of the combine; and (4) The economies of owning a combine. Illustrated by means of line drawings, charts, graphs and pictures.

_____. Examination: Combines and Combining. 1965, \$.10.

Consists of 50 objective questions for use with the student manual.

_____. Slides: Combines, Principles of Operation. 1968, \$6.00.

Thirty-nine color slides and script for use with student manual listed above. The design of the combine and how adjustments are made, are illustrated.

Farm Business Management: 01.0104

ILLINOIS

Agricultural Business Management-Principles that Affect Production. Student's Guide, 1967, 24 pages, \$.30, Offset.

Some of the economic principles that can be applied to agricultural business management are discussed in this production-based unit.

Agricultural Charts--(Agricultural Economics Visuals). 1969, \$1.40.

The charts in this set are based on information from the USDA Handbook of Agricultural Charts for 1968. It contains 51 visuals.

12(A)

16

Appraising Farm Building. Student's Guide, 1970, 24 pages, \$.30, Offset.

The guide examines problems of appraising farm buildings and provides information about various methods of appraisal.

Determining Credit Needs on the Farm. Student's Guide, 1969, 12 pages, \$.15, Offset.

The unit shows the need for capital on different kinds of farms and illustrates the credit needs of an Illinois grain-livestock farm.

A Farm Record Problem. Student's Guide, 1970, 8 pages, \$.06, Offset.

The content is the record from an Illinois farm for 1970 on an owner-operated basis. The material has been prepared for use with the Illinois Farm Record Book.

Fitting Machinery and Equipment to the Farm. Student's Guide, 1965, 20 pages, \$.25, Offset.

Farm profits are the difference between returns and costs. Machinery and equipment are costs for most farmers. Keeping costs low may be a means of increasing net income. These topics are explored in this leaflet.

The Illinois Crop-Share Cash Farm Lease (Slidefilm 340-65). 1965, \$1.40.

This is a black and white, single-frame slidefilm of 65 frames. It illustrates parts of the Illinois crop-share cash farm lease as they might appear on a sample Illinois farm. Notes the five legal essentials as they occur throughout the lease and includes suggestions that should help to provide for a fair means of dividing income and expenses between the landlord and tenant.

Illinois Farm Record Book. Teacher's Key, 1970, 30 pages, \$.50, Offset.

Contains the record book entries covering the operator's share of farm receipts for the year 1970.

Inventory Your Resources (Slidefilm 370-65). 1965, \$1.20.

This is a black and white, single-frame slidefilm of 51 frames. It discusses and illustrates the making of inventories for the four resources--land, labor, capital, and management--for use

in a new farm plan in an actual farm situation. Includes soil maps, field maps, and lists of buildings, machinery, and equipment.

Keeping Records of the Supervised Farming Program. Student's Guide, 1967, 28 pages, \$.35, Offset.

The supervised farming program activities are developed around productive enterprises, improvement projects, and supplementary farm practices. This unit explores in some detail these activities.

Law for the Farmer. Student's Guide, 1970, 24 pages, \$.30, Offset.

Seven main sections of the booklet deal with an important area in which law and farm business meet. Covered are topics such as property, landlord and tenant, drainage and water rights, fences, livestock, and animal diseases.

Plan the Land-Use Program and Estimate Crop Production (Slidefilm 371-65). 1965, \$1.05.

This is a black and white, single-frame slidefilm of 39 frames. It carries a problem farm through the steps of planning the cropping system and estimating the value of crop production. It explains net income considerations as well as those concerning soil conservation.

Planning for Repayment of Loans. Student's Guide, 1969, 16 pages, \$.20, Offset.

The unit explores a method of determining whether available funds will be sufficient to meet expenses in future years and how much money may need to be borrowed.

Planning Your Farm Business. Student's Guide, 1969, 32 pages, \$.30, Offset.

The booklet provides forms and space to record a farm inventory of what presently is available. There is space and suggestions for plans covering the use of land, crop production, livestock, earnings, and the like.

Problem Illustration for Planning Your Farm Business. Student's Guide, 1970, 11 pages, \$.10, Offset.

The leaflet provides an illustration of a filled-in booklet to estimate various cost and return items, including as a final figure, the estimated farm and family earnings.

Profit Prospects for Cattle Feeding (Slidefilm 376). 1968,
\$3.55.

This is a color, single-frame slidefilm of 64 frames. It discusses the present condition of agriculture, changes in cattle marketing, sources of Illinois feeder cattle, buying cattle, the demand for beef in the future, annual costs, typical costs of various systems, and the use of a partial budget.

Standards for Measures of Efficiency for 1970. Student's Guide, 1970, 6 pages, \$.06, Offset.

The leaflet provides efficiency measures for beef breeding, dairy, feeder cattle, poultry, sheep, and swine in the animal science area. It provides tables for corn, soybeans, oats, and wheat in the plant science area. A schedule of land values and a preliminary crop yield report is also included in the standards.

Use of Credit--(Agricultural Economics Visuals). 1968,
\$.25.

This is a set of 6 visual masters that illustrates the use of a cash flow budget.

The Use of the "Income Possibilities" Form. Student's Guide, 1967, 8 pages, \$.06, Offset.

This leaflet illustrates how to use the "income possibilities" form. The major purpose of the material is to provide a short-cut method of selecting the most profitable crop and livestock enterprises for a farm.

Using Credit to Increase Farm Earnings. Student's Guide, 1969, 8 pages, \$.10, Offset.

The unit shows the importance of credit in achieving the desired earnings from farming. Content supports the thesis that sufficient capital needs to be under your control to make labor and management productive.

Using the Illinois Farm Record Book. Student's Guide, 1969, 20 pages, \$.20, Offset.

The information provided in this booklet applies to record books in general - not to a specific book. It makes the job of record keeping reasonably simple.

What Records Tell About This Farm (Slidefilm 357A). 1969,
\$3.60.

This is a color, single-frame slidefilm of 65 frames. It shows the record results obtained from a farm in Champaign County and compares these with standards for similar farms. Studies a system for trouble-shooting the farm business and discusses strong and weak points of farming.

INDIANA

Organizing and Conducting Programs in Agricultural Sales and Service Occupations. Handbook, 1967, 112 pages,
\$.75, Offset.

This handbook is a guide for organizing and conducting agriculture sales and service occupations programs in the public schools of Indiana. Sample forms and other information are included throughout the handbook.

A Year's Record on An Indiana Farm - Bulletin No. 168. Instructor's Guide, 1966, 34 pages, \$.25, Offset.

Developed to assist instructors teach students how to keep accurate usable farm financial records. It contains all data from the records of a 50-50 livestock share agreement, father and son operated farm. The father was the owner, the son was the operator.

_____. Student Bulletin No. 169. 1967, 95 pages,
\$.25, Offset.

Contains accounting forms which are to be kept by the student.

NEW YORK

Farm Production and Management. Teacher's Guide, 1970,
46 pages, \$.50, Offset.

This guide for planning and organizing programs in farm production and management is intended to aid school administrators, directors of occupational instruction, instructors, and others in establishing and conducting classes for young people in this occupational area. Content includes items such as applied mechanics in agriculture, field and forage crops, vegetable crops, apple production, grape production, soil science, livestock, and the like. Suggestions for planning facilities and equipment, and help with selecting instructional materials are also given.

OHIO

Farm Business Planning and Analysis Filing System.
Teacher's Guide, 1971, 6 pages, \$1.00, Offset.

Content consists of instructional manual and four sheets of gummed labels. Designed to assist farmers in organizing and filing for ready reference the papers concerning operation of a farm business.

Profit - Maximizing Principles. Teacher's Guide, 1970, 127 pages, \$2.00, Offset.

Developed to assist the teacher in stimulating student thinking, understanding, and decision making associated with profit-maximizing principles. Six principles are included in the content with illustrations. Work sheets, quizzes, and references are included with each section.

PENNSYLVANIA

The Application of Selected Business Principles to Farming Program Record Keeping. Resource Unit, 1965, 89 pages, \$.50, Offset.

A resource unit for teachers and students. Contains information about accepted business practices applied to farming as a business enterprise. The material is divided into 12 problem areas or topics. Appendices include a bibliography and a list of visual aids.

Making Management Decisions Using Farm Records. Student Handbook, 1967, 75 pages, \$1.00, Offset.

A resource book for use in adult classes. The content is divided into six problem areas concerned with all forms of record keeping necessary for efficient farm operation. A bibliography is included.

Agricultural Production, Other: 01.0199

ILLINOIS

Approved Practices.

These approved practices leaflets have been prepared for student use in agriculture courses. There are nine leaflets that make up the series.

Approved Practices for Beef. Student's Guide, 1968, 4 pages, \$.05, Offset.

Covers such items as getting started with beef, selecting foundation stock, caring for cow and calf, feeding cattle for market, and the like.

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Approved Practices for Dairy. Student's Guide, 1968, 6 pages, \$.05, Offset.

Items covered in this leaflet follow the format shown above. Emphasis is given to keeping and using records.

Approved Practices for Sheep. Student's Guide, 1968, 4 pages, \$.05, Offset.

Material covered follows the format established above with details on marketing and record keeping.

Approved Practices for Swine. Student's Guide, 1968, 4 pages, \$.05, Offset.

Covered in the leaflet are items about housing, feeding, handling, breeding, and caring for swine.

Approved Practices for the Corn Enterprise. Student's Guide, 1968, 4 pages, \$.05, Offset.

The leaflet, among other things, covers such topics as testing soil and applying fertilizer, selecting seed, planting, cultivating, controlling disease and insects, harvesting, and record keeping.

Approved Practices for Oats. Student's Guide, 1968, 4 pages, \$.05, Offset.

Content follows the format laid down for corn. Emphasis is given to selecting seed to yield well in your area.

Approved Practices in Soybeans. Student's Guide, 1968, 4 pages, \$.05, Offset.

The leaflet follows the format laid down in the corn enterprise. There is a worksheet for evaluating practices introduced in this guide.

Approved Practices for Wheat. Student's Guide, 1968, 4 pages, \$.05, Offset.

The leaflet treats the subject of wheat using the standard format described above. An evaluation sheet is included in the guide.

Approved Practices for Alfalfa. Student's Guide, 1968, 4 pages, \$.05, Offset.

Content is handled using the standard format described above. An evaluation sheet is also available.

NORTH DAKOTA (NDSU)

Agricultural Entomology. Resource Unit, 1967, 37 pages, \$.50, Mimeo.

The resource unit contains eight major units. The units are broken down into guide questions, references, key facts, summaries, and visual aids.

OHIO

Agricultural Production - Curriculum Guide. Instructor's Guide, 1967, 138 pages, \$2.00, Offset.

This publication has been developed to cover instruction for grades 9 through 12 for those students intending to enter farming as a vocation. The following areas are covered: supervised occupational experience, plant science, animal science, agricultural mechanics, farm business management, and leadership training. Each area of instruction is divided into teaching units in outline form.

SOUTH CAROLINA

Keeping Agriculture Records. Teacher's Guide, 1970, 41 pages, \$1.00, Offset.

The guide includes the basic elements of keeping and using records in agriculture or other types of business. There are sufficient lesson materials to provide instruction for up to four weeks. Lesson content is available on transparencies and master copies are available for duplication where facilities for this reproduction are convenient for the teacher. Topics covered include the need for agricultural records, preparing a financial statement, taking an inventory, depreciating capital items, keeping records of expense and income, and keeping other business records.

_____. Teacher's Resource, 1970, 33 transparencies, \$3.00, Offset*.

The transparencies are prepared as a teaching resource and parallel the teacher's guide and student record book in production agriculture. They are helpful in teaching concepts important to one who would keep accurate records. This resource has great enrichment value and has possibilities as a motivational device.

Note: * All transparencies are unframed and printed by offset press on 8 $\frac{1}{2}$ -inch clear three Mil Trycite, a Dow Chemical Company product.

Record Book. Teacher's Guide, 1970, 37 pages, \$1.00, Offset.

The record book contains sample entries of both supervised farming and farm placement records. It contains the basic principles needed for accurately keeping records. It is intended that the principles be learned and that the student have developed a working background before using their own Vocational Agriculture Record Book.

AGRICULTURAL SUPPLIES/SERVICES: 01.02

Agricultural Chemicals: 01.0201

ILLINOIS

Calibrating Field Sprayers (Slidefilm 442). 1969, \$3.35.

This is a color, single-frame slidefilm of 57 frames. It discusses the steps to follow in the calibration of field sprayers before applying herbicides to field crops.

Calibrating A Granular Applicator (Slidefilm 443). 1969, \$2.55.

This is a color, single-frame slidefilm of 32 frames. It discusses the factors that affect calibration and the steps you would follow when calibrating an applicator for use with herbicides or insecticides in granular form.

Recognizing Herbicide Injury (Slidefilm 798). 1968, \$3.45.

This is a color, single-frame slidefilm of 61 frames. It shows how corn, soybeans, and some other common field crops have been damaged by improper use of herbicides.

A Systematic Approach to Weed Control (Slidefilm 799). 1969, \$3.25.

This is a color, single-frame slidefilm of 55 frames. It discusses the factors to be considered when selecting a herbicide for weed control in corn and soybeans. With captions.

Using Pre-emergence Herbicides (Slidefilm 797). 1967, \$2.95.

This is a color, single-frame slidefilm of 45 frames. It gives information concerning pre-emergence herbicides, including how they work, what risks are involved in their use, and how to get the best results. Additional points covered include the nature of the weed problem, the need for early planting, flexibility in timing of cultivation, "Weather insurance," and the need for complete weed control.

Weed Control--(Plant and Soil Science Visuals). 1966,
\$1.00.

This is a set of 36 visual masters on controlling weeds in corn and soybeans. Recommended chemicals are discussed.

MICHIGAN (O.M.)

Agricultural Chemicals. Unit 10. Student's Manual, 1969,
30 pages, \$.75, Offset.

The content of this unit provides seven lessons on chemicals. Control is stressed, and lessons cover control of weeds, fungus, livestock pests and household pests. The unit is designed to prepare the student to work actively in the agricultural chemical industry. Emphasis is on the sales and marketing of agricultural products.

MISSISSIPPI

A Reference on Liming Soils for Greater Profits. Instructor's Guide, 1967, 25 pages, \$1.00, Offset.

The manual is designed to provide teachers and students with a comprehensive view of liming soil in the state of Mississippi for greater profits. It contains eight chapters covering agriculture lime, its source, use, and proper applications.

NORTH DAKOTA (NDSU)

Using Chemicals to Control Weeds. Resource Unit, 1966,
42 pages, \$.50, Mimeo.

The units are broken down into guide questions, reference, key facts, summary, and visual aids.

Feeds: 01.0202

ILLINOIS

Feed Additives. Student's Guide, 1965, 8 pages, \$.10,
Offset.

Topics covered by this leaflet include such things as antibiotics, arsenicals, hormones, tranquilizers, and some other additives.

Silage as an Animal Feed. Student's Guide, 1970, 8 pages,
\$.10, Offset.

The leaflet treats the subject of silage as it relates to dairy cattle, beef cattle, sheep, and swine. Tables giving recommended feeding levels are included as well.

Urea as a Ruminant Supplement. Student's Guide, 1967,
8 pages, \$.10, Offset.

Urea is an economical source of nitrogen that ruminants can use. Thus, urea fits into many feeding situations. These and other technical details of protein utilization are discussed in this leaflet.

MICHIGAN (O.M.)

Feed Sales and Service. Unit 7. Student's Manual, 1969,
37 pages, \$.75, Offset.

The content is intended to aid the student to develop the understandings and the abilities needed for employment and advancement in the ~~retail~~ feed business. Among the material covered in the ~~seven~~ lessons are such items as: Methods used and common trends in feed merchandising, basic animal nutrition, and the basic economies of livestock feeding.

PENNSYLVANIA

Dairy Cattle Nutrition. Teacher's Guide, 1965, 43 pages,
\$.40, Mimeo.

For use with classes in the secondary school and adult program. Content consists of a teacher's unit plan and four units of instruction under title of problem areas. A sample examination together with a key is included.

_____. Student's Handbook, 1965, 68 pages, \$1.00,
Offset.

TEXAS (A&M)

Feed Sales and Serviceman. Course of Study, 1966, 208
pages, \$2.50, Offset.

These materials are designed for the student enrolled in the Agricultural Cooperative Part-time Training Program. Content consists of eight units of instruction subdivided into 39 topics. The topic materials are organized as assignment sheets, information sheets and topic test sheets. Answer sheets are provided for questions and problems listed on the assignment and topic test sheets. References are included.

Seeds: 01.0203

ILLINOIS

Seed Quality--A Major Factor in Crop Yields (Slidefilm 796).
1966, \$2.75.

This is a color, single-frame slidefilm of 39 frames. The following points are stressed in the film: seed costs, seed selection, and various management decisions.

OHIO

Some Common Crop and Weed Seeds. Slides, 1966, \$8.00.

A series of 52 color slides and script to accompany the publication "Some Identifying Characteristics of 52 Ohio Seeds." Includes close-up views of the crop and weed seeds included in the Ohio agronomy contest.

Fertilizers: 01.0204

ILLINOIS

Hunger Signs in Crops. Student's Guide, 1968, 12 pages, \$.15, Offset.

Content includes information on common hunger signs of crops, verifying hunger signs, and guidance in improving soil fertility.

Planning a Fertilizer Program. Student's Guide, 1964, 8 pages, \$.10, Offset.

Covered in this guide are the probable responses from the use of limestone, phosphorus, and potassium. It deals with problems arising when combinations are limiting.

The Soil Fertility Program. Student's Guide, 1964, 16 pages, \$.20, Offset.

A rather definite plan or fertility system is a necessary part of a good farm plan. This unit presents some basic problems to consider and suggests some procedures to follow in making decisions about a fertility program.

MICHIGAN (O.M.)

Fertilizer--Sales and Service. Unit 9. Student's Manual, 1969, 32 pages, \$.75, Offset.

This manual contains eight lessons dealing with plant growth and nutrients, soil structure, and chemical characteristics of fertilizers. It relates this information to customer advice and selection of fertilizers, and the maintenance of fertilizer equipment. There is included in the publication student activity sections providing ample opportunity to apply the knowledge gained to situations, thereby strengthening learning. There is also included suggestions for evaluation so that an assessment of learning may be made by the teacher and the student.

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TEXAS

Fertilizer Sales and Serviceman. Course of Study, 1966, 193 pages, \$2.50, Offset.

These materials are designed for the student enrolled in the Agricultural Cooperative Part-time Training Program. Content consists of ten units of instruction subdivided into 45 topics. The topic materials are organized as assignment sheets, information sheets and topic test sheets. Answer sheets are provided for questions and problems contained on the assignment and topic test sheets. References are included.

Agricultural Supplies/Services, Other: 01.0299

ALABAMA

Agricultural Supplies. Student's Guide, 1971, 154 pages, \$1.00, Mimeo.

The guide covers 42 jobs designed for 11th and 12th grade students. There appears in it such topics as how animals use feeds, understanding seeds, damage done by weeds, fertilizers, soil testing, pipe work, electrical wiring and many more.

ILLINOIS

Salesmanship in Agricultural Business. Student's Guide, 1970, 24 pages, \$.30, Offset.

This guide tells much of what is important to know about the sales opportunities in agriculture.

MICHIGAN (O.M.)

Agricultural Salesmanship. Unit 4. Student's Manual, 1969, 22 pages, \$.75, Offset.

This unit contains four lessons. They include: How to meet the customer, how to present supplies and services, how to overcome resistance, and how to close the sale. There is a bibliography of 39 items to supplement the text material in the manual. Student activity provides many opportunities to apply principles, including suggested role playing situations using tape recordings.

Business Procedures. Unit 6. Student's Manual, 1969, 42 pages, \$.75, Offset.

This unit includes eight lessons associated with a sales organization. Topics covered in the lessons include such things as the use of business forms, the need for stock

control, the importance of complete and accurate records, and many more. Each lesson provides for student activity with several alternatives as well as a section on evaluation for the student to assess his progress.

Career Opportunities. Unit 1. Student's Manual, 1968, 12 pages, \$.75, Offset.

This is one of a series of units intended to be used as student manuals in an individualized instruction situation and under the guidance of the teacher. The material is so organized that the student studies and applies principles to situations of interest to him. There are masters from which a number of transparencies can be made. In addition, there is a section in each lesson in which student activity takes on the nature of an assignment with several alternatives open to the student and the teacher. Purpose of the manual is to help the student understand the opportunities for employment in the agricultural supply, sales and service occupations.

Farm Equipment. Unit 11. Student's Manual, 1969, 23 pages, \$.75, Offset.

This unit provides the background information about opportunities for employment in the farm equipment sales and service business. It consists of six lessons covering job requirements and personal characteristics of the parts man, sales personnel, and service personnel.

Farm Power Sales and Service. Unit 12. Student's Manual, 1969, 23 pages, \$.75, Offset.

Employees of farm power dealerships need to be familiar with the ways in which internal combustion engines are classified so they can recognize all types when customers bring in power equipment for service and when customers inquire about new equipment they may be interested in buying. To help students become familiar with the sales and service aspects of the farm power dealership, this unit explores such topics as the electrical system, the cooling system, the fuel system, the power train, the hydraulic system, and lubrication of farm power units.

Garden Center. Unit 8. Student's Manual, 1969, 43 pages, \$.75, Offset.

This unit has been prepared to develop knowledge of products rather than the technical knowledge or special skills of

the gardener. The lessons cover products offered for sale, plant materials (including varieties, characteristics, and use), customer problems, and many more. The bulletin contains an extensive bibliography consisting of more than 220 items.

Organization and Functions of Agricultural Business. Unit 5.
Student's Manual, 1969, 19 pages, \$.75, Offset.

There are four lessons in this unit that stress the importance, functions, and types of agricultural supply business. Organizational patterns that apply to this business are treated in detail in the final lesson. Illustrations help the learner to better grasp organizational patterns discussed in the text of the manual.

Orientation to Supervised Occupational Experience Program.
Unit 2. Student's Manual, 1969, 25 pages, \$.75, Offset.

The manual contains three lessons. They cover the purposes of supervised occupational experience programs, the development of favorable attitudes toward this program, and a plan for entrance into and advancement in an agricultural occupation through a supervised occupational experience program.

NEW MEXICO

A Suggested Course of Study for Agribusiness in New Mexico.
Course Outline, 1970, 7 pages, Free, Mimeo.

A guide for teachers who are preparing students to select suitable off-farm agricultural occupations and who are preparing farm youth for employment.

NEW YORK

Suggestions for Developing Courses of Study in Agricultural Business. Course of Study, 1967, 46 pages, \$.50, Offset.

The guide was developed to assist local schools develop Agricultural Business courses for juniors and seniors in high school or area vocational centers. It contains a breakdown of units to be offered in a team-planned program to prepare students for agricultural-related business occupations.

OHIO

Agricultural Supplies Business and Service. Student's Manual, 1968, 451 pages, \$5.00, Offset.

A series of 15 lesson units for related classes to provide the student with basic information needed in all of the

agricultural businesses. Provision is made for the student to work out practical exercises in conjunction with his occupational experience program.

Office Procedures Used in the Agricultural Services. Student's Manual, 1969, 86 pages, \$1.25, Offset.

Designed for the student working as an office clerk in an agricultural business. Includes information on problems outlined under the following headings: sales tickets, accounts receivable records, purchase orders, perpetual inventory, sales tax, discounts, daily cash balance, monthly bank balance, and grain accounts.

Test and Answer Supplement. Teacher's Guide, 1969, 64 pages, \$2.00, Offset.

AGRICULTURAL MECHANICS: 01.03

Agricultural Power and Machinery: 01.0301

ALABAMA

Agribusiness Power Mechanics. Student's Guide, 1970, 166 pages, \$1.00, Offset.

This two-year course contains 36 jobs for high school students at the 11th and 12th grades. Topics include such things as fundamentals of power engines, repair of small gasoline engines, engine tests, lubrication systems, fuel systems, valve mechanisms and several more.

ILLINOIS

Air Compressors. Student's Guide, 1965, 20 pages, \$.25, Offset.

Compressed air has become increasingly important to the farmer and home owner. It helps do many jobs with greater ease than formerly. The content of this guide provides insights into the technical aspects of air compressors and their care and use.

The Engine Cooling System. Student's Guide, 1968, 24 pages, \$.30, Offset.

Operators of farm equipment, like those who drive an automobile, must understand the function of the engine cooling system. This guide indicates test to make on the system and steps to follow in preventive maintenance.

The Planter-Selection, Adjustment, Maintenance, and Use. Student's Guide, 1967, 40 pages, \$.50, Offset.

This guide is designed to help the farmer properly adjust and use the planter so that it will perform all the functions expected of this important piece of equipment.

Safety in the Agricultural Mechanics Shops. Student's Guide, 1967, 24 pages, \$.30, Offset.

The content, in addition to establishing the general rules for safety in the agricultural mechanics shop, covers safety when working with hand tools, electricity, tractors, soldering irons, and metal working equipment.

Small Engines--Repair and Overhaul. Student's Guide, 1965, 20 pages, \$.25, Offset.

Small internal combustion engines can be overhauled if the owner has access to the proper tools and knows how to use them. The content of this guide provides much needed information for one who would recondition an engine and thereby achieve a reasonable cost outlay.

The Storage Battery. Student's Guide, 1967, 32 pages, \$.40, Offset.

The content of this unit is designed to help one understand the storage battery, its installation, its charging, and testing. Safety measures to be taken when working with a battery are also included in this well-illustrated booklet.

Tires for Farm Equipment. Student's Guide, 1970, 20 pages, \$.25, Offset.

Because the investment in tires on modern farm equipment may be several thousand dollars, those who operate equipment should know how to care for these tires to secure maximum life and service from them. Steps in a program of the maintenance and nine other topics are covered in this unit.

The Two-Cycle Engine. Student's Guide, 1967, 20 pages, \$.25, Offset.

Today, two-cycle gasoline engines are used to power many farm labor savings tools and devices. This guide provides information helpful in servicing and maintaining these engines.

NEW MEXICO

Gasoline Engines in Vocational Agriculture. Instructor's Guide, 1967, 8 pages, Free, Mimeo.

A series of six lesson plans dealing with the fundamentals of operation and maintenance of gasoline engines.

NORTH DAKOTA (NDSB)

Farm Machinery and Accessories. Teacher's Manual, 1970, 14 pages, Free, Mimeo.

The manual provides the teacher with an outline helpful in organizing teaching activities covering a wide range of power equipment and machinery in the farm shop area.

NORTH DAKOTA (NDSU)

Handbook on the Operation and Safe Use of Power Equipment. Teacher's Manual, 1968, 17 pages, \$.25, Mimeo.

The manual contains a series of suggestions helpful in the safe use of power equipment. Each statement is brief and to the point. It should prove very valuable in keeping school shop accidents at a low level.

OHIO

Mowers. Student's Workbook, 1966, 58 pages, \$.75, Offset.

Designed to assist students in understanding the principles of cutterbar operation and in application of this knowledge to the operation and repair of the mower.

PENNSYLVANIA

Small Gasoline Engines. Student's Handbook, 1966, 70 pages, \$1.25, Offset.

Resource material for student use in secondary and adult classes. Content is divided into five units of instruction with provision for classroom and laboratory exercises in four of the units. A list of definition of terms is included. Illustrated.

Tools, Equipment and Reference Materials for a Gasoline Engine Teaching Unit. Instructor's Guide, 1967, 8 pages, \$.25, Offset.

For high school vocational agriculture classes. Resource material for use in preparing a unit of instruction. Illustrated.

TEXAS (A&M)

Agricultural Machinery Occupations--Implements. Instructor's Guide, 1967, 278 pages, \$4.00, Offset.

These materials are for use of students enrolled in cooperative part-time training programs in Agricultural Machinery Occupations. These are identified as Repairman, Set-Up and

Deliveryman, Mechanic's Helper, Partsman, and Service Supervisor. An outline is included which indicates the sequence of learning experiences to be followed for each occupation. The content is divided into 13 units subdivided into 60 topics. The material is organized into assignment sheets, information sheets, and topic test sheets. In addition, answer sheets are provided for the questions and problems contained on assignment sheets and topic test sheets. References are included.

Agricultural Machinery Occupations--Power. Instructor's Guide, 1967, 377 pages, \$4.00, Offset.

These materials are for use of students enrolled in cooperative part-time training programs in Agricultural Machinery Occupations. These are identified as Repairman, Set-Up and Deliveryman, Mechanic's Helper, Partsman, and Service Supervisor. An outline is included which indicates the sequence of learning experiences to be followed for each occupation. The content is divided into 13 units which are subdivided into 66 topics. The material is organized into assignment sheets, information sheets and topic test sheets. Answer sheets are provided for the questions and problems contained on the assignment sheets and topic test sheets. References are included.

Agricultural Structures and Conveniences: 01.0302

ALABAMA

Agribusiness Construction. Student's Guide, 1970, 144 pages, \$1.00, Offset.

The study guide, prepared for 11th and 12th grade students, provides questions, answers, suggested learning activity, skills to perform and projects to build. Individual study and group discussion are features of this well-illustrated guide.

Agribusiness Woodworking. Student's Guide, 1970, 146 pages, \$1.00, Offset.

This guide provides two years of instruction for grades 11 and 12. A bibliography of texts and a series of questions and problems keyed to the text materials are included. Jobs in the instruction include such things as building a carpenter's bench, sizing and squaring a table top, making lap joints, drawer rails and guides and many other items.

Soil Management: 01.0303

ILLINOIS

Developing the Land-Use Plan and Field Layout. Student's Guide, 1964, 8 pages, \$.10, Offset.

This unit is designed to combine the decisions about cropping systems, erosion control measures, and field arrangements into a practical, efficient farm operating entity.

Field Arrangement Principles. Student's Guide, 1965, 8 pages, \$.10, Offset.

The guide offers constructive help in determining the size and shape of fields for efficient use of land, labor, machinery and fencing.

Planning for Sound Land Use. Student's Guide, 1964, 12 pages, \$.15, Offset.

If the productive capacity of the soil is to be maintained, erosion must be controlled and soil fertility maintained. This guide provides information important to sound land use.

Agricultural Mechanics Skills: 01.0305

ALABAMA

Agribusiness Metalworking. Student's Guide, 1970, 134 pages, \$1.00, Offset.

The metalworking course is designed for two years and provides 45 jobs. The first year is intended to take the learner through job number 23. Topics include among others, safety, identification of metals, machining metals, arc and oxy-acetylene welding, sheet metal work and the like.

General Agricultural Mechanics. Student's Guide, 1970, 189 pages, \$1.00, Offset.

This well-illustrated guide contains 57 jobs ranging from the use of the grinder, sewage disposal systems, curing concrete and the like to welding, and the gasoline engine. The content is intended for students at grades 11 and 12. This guide is one in a series on Agribusiness.

General Shop Guide for Vo-Ag Students. Student's Guide, 1969, 179 pages, \$1.00, Offset.

Content is intended for high school students and includes such shop topics as safety, care and use of hand and power tools, wood, paint, electricity, plumbing, concrete work, and mechanics.

ILLINOIS

Electrical Fundamentals Useful in Engine Analysis. Student's Guide, 1970, 20 pages, \$.25, Offset.

Contained in this unit of instruction are such topics as fundamentals of electricity, magnets and magnetism, and electrical measuring instruments.

Engine Compression and Cylinder Leakage Testing. Student's Guide, 1967, 16 pages, \$.20, Offset.

Content of this guide is given over to a discussion of the principles of four-cycle engine operation, the effects of cylinder leakage, and testing for cylinder leakage.

The Ignition System--Testing, and Analyzing Test Results. Student's Guide, 1967, 28 pages, \$.25, Offset.

This booklet covers 16 topics dealing with components of the battery ignition system. It contains many illustrations helpful to students learning to test and analyze trouble in the system.

Learning Arc Welding Skills. Part 1: Process, Equipment, and Safety (Slidefilm 450-64). 1964, \$5.00 for set of 3.

This is a color, single-frame slidefilm of 45 frames. It describes the equipment used in arc welding and safety precautions to follow.

. Part 2: Flat Position Welding (Slidefilm 451-64). 1964, Priced with Set.

This color, single-frame slidefilm of 63 frames tells how to strike and hold the arc, run beads, and how to make down-hand, fillet, lap, and corner welds.

. Part 3: Vertical, Overhead, and Horizontal Position Welding (Slidefilm 452-64). 1964, Priced with Set.

This is a color, single-frame slidefilm of 34 frames. It describes how to make out-of-position welds.

Micrometers and Related Measuring Tools. Student's Guide, 1967, 8 pages, \$.10, Offset.

Mechanics use micrometers chiefly to measure wear on engine parts. Because the micrometer measures accurately to a thousandth or ten-thousandth of an inch, one must know how to ac-

curately read the instrument. The information in this leaflet provides the basic knowledge for developing this reading "know-how."

Oxy-Acetylene Welding--(Agricultural Mechanics Visuals).
1965, \$2.00.

This is a set of 73 visuals on various aspects of oxy-acetylene welding and cutting. This series was prepared from material developed by The Linde Division, Union Carbide Company.

The Portable Electric Saw--How to Use It Safely (Slide-film 465). 1964, \$3.35.

This is a color, single-frame slidefilm of 57 frames. The film identifies the parts of the saw and gives some suggestions as to the size of saw to select for various jobs. It shows the blades used with the saw to cut different materials. Special applications such as butt cuts, lap joints, notching and angle cuts are shown. The film emphasizes safety precautions to follow when using the saw.

The Power Grinder--How to Use It Safely (Slidefilm 463).
1964, \$3.05.

This is a color, single-frame slidefilm of 48 frames. It includes description of various types of grinders and suggestions to follow when selecting a grinder. This film lists safety checks, adjustments and safety precautions to follow when using the grinder.

The Safe Use and Care of Ladders (Slidefilm 497). 1965,
\$1.10.

This is a black and white, single-frame slidefilm of 42 frames. It describes the safe use of stepladders, straight and extension ladders. It presents important safety measures to remember when erecting, climbing and working on ladders.

Shop Safety - Grinder--(Agricultural Mechanics Visuals).
1967, \$.30.

This is a set of 7 visuals on safe use of the power grinder.

Shop Safety - Vise--(Agricultural Mechanics Visuals). 1967,
\$.35.

This is a set of 8 visuals on the proper and safe use of vises.

Soldering For Home, Farm, and Shop Applications. Student's Guide, 1968, 24 pages, \$.30, Offset.

Content deals with the joining together of metals, using solder and a flux. Many appliances and equipment items can be quickly and economically repaired in the home or farm shop if the basic principles set forth in this guide are understood and practiced.

The Spark Plug--Operation, Selection, and Maintenance. Student's Guide, 1967, 20 pages, \$.25, Offset.

Construction, operation, and selection of spark plugs are presented in this informational unit associated with the internal combustion engine.

Spot Welding for Agriculture Mechanics Shops. Student's Guide, 1970, 12 pages, \$.15, Offset.

Many parts of farm equipment are fabricated, using the spot-welding process. The farm shop operator who would make repairs or develop new pieces of equipment needs to understand the potential in this welding process. This leaflet provides an excellent explanation of the process and its uses.

Tractor Safety. 1970, \$2.10.

This is a set of 40 transparencies on the safe use and operation of tractors. The series was prepared from material developed by International Harvester Company, The Oliver Corporation, Massey-Ferguson, Inc., and the Farm and Industrial Equipment Institute.

Using the Carbon-Arc Torch. Student's Guide, 1969, 12 pages, \$.15, Offset.

This leaflet provides information about the carbon-arc torch and illustrates how to use it. The torch may be used for such things as heating metal, bending, melting lead and solder, brazing, heat-treating and the like.

Using the Level in Farm Surveying (Slidefilm 438). 1964, \$1.25.

This black and white, single-frame slidefilm of 53 frames provides instruction in the proper procedures to follow when using the hand level, tripod level, and target rod. It describes how to determine the slope and how to stake

out contours with the hand level. It gives instructions on setting up, focusing, and caring for the tripod level, and suggestions on how to read the target rod.

Using the Level to Stake Out a Building Site (Slidefilm 439). 1966, \$.85.

This black and white, single-frame slidefilm of 25 frames presents suggestions for setting up the level over a specific point. It shows how to stake out a building with respect to another existing building and how to erect batterboards at the corners of the new building.

MICHIGAN (O.M.).

Tractor Tune-up and Maintenance. Unit 15. Student's Manual, 1969, 39 pages, \$.75, Offset.

The unit is designed to develop in the trainee an understanding of the importance of a properly tuned tractor and to establish in his mind a systematic procedure to follow when making needed adjustments. There are ten lessons with structured activities established to provide opportunities to determine the capability of students in applying information and knowledge provided in the manual and in the references.

NEW MEXICO

Arc Welding in Vocational Agriculture. Instructor's Guide, 1966, 21 pages, Free, Mimeo.

A series of ten lesson plans in basic arc welding for use with classes in vocational agriculture.

Cold Metal Work in Vocational Agriculture. Instructor's Guide, 1967, 6 pages, Free, Mimeo.

A series of five lesson plans concerned with the fundamentals covering the identification, cutting, drilling, bending, and threading of cold metal for use in shop class in vocational agriculture.

Job Breakdowns for Farm Mechanics Instruction in Vocational Agriculture I. Instructor's Guide, 1967, 39 pages, Free, Mimeo.

Prepared to assist the instructor in making class demonstrations and then are mounted in student work areas for reference as needed. Job breakdowns cover sharpening of wood tools, welding and brazing, servicing and maintenance of farm tractors.

NEW YORK

Agricultural Mechanization. Teacher's Guide, 1969, 36 pages, \$.50, Offset.

Planning occupational programs for mechanics in agriculture has become vital because the mechanization of farming has developed at a phenomenal rate in recent years. The guide includes orientation to the world of work, agricultural power mechanics, planting and fertilizing equipment, weed control equipment, and related topics. Sections of the guide suggest facilities needed, equipment, and instructional materials helpful in planning programs, and in developing the course of study.

TEXAS (A&M)

Laboratory Exercises and Lesson Plans for Pre-Employment Laboratory Training in Agricultural Machinery Service and Repair. Instructor's Guide, 1967, 316 pages, \$3.75, Offset.

A vocational agriculture resource unit for use of the instructor in providing learning experiences for students enrolled in agricultural machinery service and repair courses. Content lists 15 units of instruction which are subdivided into 73 lesson plans, 24 information sheets, and 33 laboratory exercises. References are included.

Agricultural Construction and Maintenance: 01.0306

ALABAMA

Agribusiness Electricity. Student's Guide, 1970, 141 pages, \$1.00, Offset.

Prepared for use in the 11th and 12th grades, the guide contains 25 jobs centered around electricity and electrical wiring. Space has been provided in the guide for answering questions and completing assignments.

Agribusiness Masonry. Student's Guide, 1970, 156 pages, \$1.00, Offset.

The content has been prepared for a two-year course at the 11th and 12th grade levels. Topics dealt with include such things as lime, mortar, concrete, and tile. Foundations, walls, fireplaces and similar structural units are also set up as lessons. There are 20 jobs included in the lessons and projects in the guide.

ILLINOIS

Concrete Masonry--(Agricultural Mechanics Visuals). 1968, \$1.25.

This is a set of 45 visuals on building with concrete masonry. The illustrations were furnished by the Portland Cement Association.

Laying Concrete Masonry Units (Slidefilm 434). 1965, \$1.25.

This black and white, single-frame slidefilm of 54 frames presents a step-by-step procedure of the techniques of laying concrete masonry units, building corners first and then completing the connecting walls.

Planning and Preparing for Concrete Masonry Construction (Slidefilm 433). 1965, \$1.35.

This is a black and white, single-frame slidefilm of 63 frames. It presents some of the advantages of concrete masonry construction and characteristics of masonry units to show their relationship to building plans and finishes. Discusses the selection of building sites and illustrates proper foundation construction.

Special Concrete Masonry Problems (Slidefilm 435). 1965, \$1.25.

This is a black and white, single-frame slidefilm of 48 frames. It shows the use of control joints, how to construct them, and how the plate is attached to the wall. It gives instructions on how to finish basement walls and how to provide proper drainage. It includes suggestions on patching and cleaning.

Spray Painting--(Agricultural Mechanics Visuals). 1964, \$1.35.

This is a set of 50 visuals on spray guns and spray painting. Illustrations in this series were furnished by Binks Mfg. Co., The DeVilbiss Co., and Sears, Roebuck & Co.

NEW MEXICO

Woodworking in Vocational Agriculture. Instructor's Guide, 1967, 12 pages, Free, Mimeo.

A series of eight lesson plans covering the use of common tools and power machines used in woodworking applicable to farming.

OHIO

Mr. Quality Concrete. Slides, 1965, \$6.00.

A series of 40 color slides which are self-explanatory, thus no script is provided. The slide series is designed to accompany the Portland Cement Association's "Concrete Technology" instructor's guide.

Agricultural Electrification: 01.0307

ILLINOIS

Diagramming Electrical Wiring Circuits (Slidefilm 401-65). 1965, \$1.30.

This is a black and white, single-frame slidefilm of 58 frames. It discusses electrical circuits and the use of standard symbols for diagramming. Shows that the use of these standard symbols makes neater diagrams which are easier to check. Includes simple rules for wiring in cable and conduit.

Identifying Electric Wiring Items (Slidefilm 404B). 1970, \$3.60.

This color, single-frame slidefilm of 66 frames is useful to Illinois teachers when unpacking and checking items contained in the Vocational Agriculture Service Electrical Wiring Loan Box. It is also helpful in teaching identification of commonly-used electrical items.

LOUISIANA

Farm Electrification Handbook for Teachers of Vocational Agriculture. Handbook, 1965 (Revised), 50 pages, \$2.00, Mimeo.

The handbook is designed to be used as a guide for vo-ag teachers in farm electrification. It contains seven lessons dealing with the theory and practices of electricity as it is utilized on the farm. It covers service entrance, wiring, fuse, and circuit breakers, wire load, and an appendix explaining the procedures of developing vo-ag lesson plans.

MICHIGAN (O.M.)

Electric Power Sales and Service. Unit 13. Student's Manual, 1969, 21 pages, \$.75, Offset.

The manual, designed for student use, contains four lessons with general background information for electric power sales and service in rural areas. The selection of content is based upon the premise that a good salesman can make recommendations to help the customer. The lessons include the following: Electrical Power Agribusiness, Adequate Farmstead Wiring, Electric Motors, and Materials Handling.

PENNSYLVANIA

Tools, Equipment, and Reference Materials Recommended for an Electric Motor Teaching Unit. Instructor's Guide, 1967, 6 pages, \$.25, Offset.

For high school vocational agriculture classes. Resource material for use in preparing a unit of instruction. Illustrated.

TEXAS (A&M)

Electrical Controls and Basic Control Circuits Used in Agricultural Production. Instructor's Guide, 1967, 58 pages, \$.75, Offset.

Prepared to assist teachers to meet the needs of their students to develop knowledge and some skills in the field of applied electricity. Content is divided into five units with lesson plans, well illustrated, for each unit. In addition, some transparencies are provided, and an answer guide to questions and problems are included in the appendix.

Farm Electrification Lesson Plans - Wiring and Safety. Instructor's Guide, 1967, 86 pages, \$1.30, Offset.

Prepared to assist teachers of vocational agriculture classes to meet the needs of their students for instruction in electrical wiring and safety incident to farm operation. Content is divided into seven units with lesson plans developed for each unit. Electrical tables, common to wiring, and a large number of transparencies to illustrate the content in the lesson plans are included.

Agricultural Mechanics, Other: 01.0399

ALABAMA

Advanced Shop Guide for Vo-Ag Students. Student's and Teacher's Guide, 1969, 190 pages, \$1.00, Offset.

This guide has been prepared as a reference for the teacher and a workbook for the student. It contains many skills that should be taught advanced vo-ag students. Topics include such items as arc welding, farm plumbing, small gasoline engines, farm electricity, painting, and hot and cold metal work.

ILLINOIS

Engine Analysis--(Agricultural Mechanics Visuals). 1969, \$2.55.

This is a set of 97 visuals on engine principles and analysis of problems. This series was prepared from material

developed by Sun Electric Corporation, American Association of Battery Manufacturers, and Delco Remy Division of General Motors Corporation.

Small Engines--(Agricultural Mechanics Visuals). 1966,
\$2.65.

This is a set of 98 visuals on small engine principles, maintenance, and repair. This series was prepared from material developed by Briggs & Stratton Corporation, Clinton Engines Corporation, Champion Spark Plug Company, McCulloch Corporation, and P. A. Sturtevant Company.

Using Power Lawn Mowers Safely (Slidefilm 498). 1966,
\$4.00.

This color, single-frame slidefilm of 78 frames contains suggestions to follow when selecting a safe mower. It contains recommendations for proper dress and for inspection of the lawn. It lists safety precautions to follow when starting the mower and mowing the lawn.

NEW MEXICO

Oxyacetylene in Vo-Ag Suggested Lesson Plan. Teacher's Guide, 1969, Free, Mimeo.

A series of lesson plans containing the basic principles for use in an oxyacetylene welding unit of instruction.

NORTH DAKOTA (NDSU)

Suggested Tools and Equipment for the Agricultural Mechanics Shop. Teacher's Manual, 1969, 24 pages, Free, Mimeo.

The manual contains a suggested list of tools and equipment. Of additional help to the teacher and administrator is a description of procedures for purchasing, including a suggested bid notice letter. Areas covered in the manual include carpentry, mechanical drawing, soil and water engineering, basic electricity, concrete and masonry, plumbing and pipefitting, soldering, welding, power mechanics, shop safety, and shop furnishings.

PENNSYLVANIA

Manual for Planning and Conducting an Agricultural Mechanics Fair. Instructor's Manual, 1967, 13 pages, \$.25, Mimeo.

Prepared to assist in the planning, development, and operation of an agricultural mechanics project fair for students of vocational agriculture and members of the Future Farmers of America.

AGRICULTURAL PRODUCTS: 01.04

Food Products: 01.0401

ILLINOIS

Identification of Beef Cuts (Slidefilm 183-65). 1965,
\$3.15.

This is a color, single-frame slidefilm of 52 frames. It illustrates the different cuts of beef and discusses means of identifying them.

Identification of Kinds of Meat (Slidefilm 181-65). 1965,
\$2.30.

This color, single-frame slidefilm of 24 frames discusses differences between beef, pork, lamb, and veal that help in identifying meat by species.

Identification of Lamb Cuts (Slidefilm 185-65). 1965,
\$2.45.

This is a color, single-frame slidefilm of 30 frames. It illustrates the different cuts of lamb and discusses means of identifying them.

Identification of Pork Cuts (Slidefilm 182-65). 1965,
\$3.00.

This color, single-frame slidefilm of 46 frames illustrates the different cuts of pork and discusses means of identifying them.

Judging Milk. Student's Guide, 1965, 8 pages, \$.15,
Offset.

This leaflet contains information helpful in determining the quality of cow's milk. Steps and conditions important in milk judging are carefully set forth in the publication.

Meat-Judging and Grading. (Second Revision). Student's
Guide, 1970, 27 pages, \$.30, Offset.

The guide points out that meat is evaluated on the basis of three major criteria; namely, conformation, finish, and quality. Factors to consider in judging beef carcasses are set forth clearly in the guide. Meat cuts and their identification are discussed in the publication as well.

Practice Set for Identification of Beef Cuts (Slidefilm 183-65 Supp.). 1965, \$2.85.

This is a color, single-frame slidefilm of 16 frames. It presents a set of pictures of beef cuts, for use in practice work in teaching students to identify beef cuts. It supplements the filmstrip entitled "Identification of Beef Cuts."

Practice Set for Identification of Lamb Cuts and Variety Cuts (Slidefilm 185-65 Supp.). 1965, \$2.55.

This color, single-frame slidefilm of 32 frames shows an unnamed set of lamb and variety cuts to be identified. It supplements the filmstrips entitled "Identification of Lamb Cuts" and "Identification of Kinds of Meat."

Practice Set for Identification of Pork Cuts (Slidefilm 182-65 Supp.). 1965, \$2.70.

This is a color, single-frame slidefilm of 37 frames. It presents a set of pictures of pork cuts, for use in practice work in teaching students to identify pork cuts. No text. It supplements the filmstrip entitled "Identification of Pork Cuts."

TEXAS (A&M)

Poultry Farm Worker - Commercial Laying Flock. Courses of Study, 1967, 378 pages, \$4.50, Offset.

Designed for the student enrolled in the Agricultural Cooperative Part-time Training Program. Content consists of 13 units of instruction subdivided into 79 topics. The topic materials are organized as assignment sheets, information sheets and topic test sheets. Answer sheets are provided for questions and problems listed on the assignment and topic test sheets. References are included.

Poultry Hatchery Employee. Course of Study, 1967, 125 pages, \$2.00, Offset.

These materials are designed for the student enrolled in the Agricultural Cooperative Part-time Training Program. Content consists of seven units of instruction subdivided into 24 topics. The topic materials are organized as assignment sheets, information sheets and topic test sheets. Answer sheets are provided for questions and problems contained on the assignment and topic test sheets. References are included.

Poultry Processing Plant Employee. Course of Study, 1967, 163 pages, \$2.50, Offset.

Designed for the student enrolled in the Agricultural Cooperative Part-time Training Program. Content consists of eight units of instruction subdivided into 40 topics. The topic materials are organized as assignment sheets, information sheets and topic test sheets. Answer sheets are provided for questions and problems listed on the assignment and topic test sheets. References are included.

Dairy Products: 01.040102

ILLINOIS

Making the Butterfat Test. Student's Guide, 1964, 8 pages, \$.10, Offset.

The leaflet approaches the subject of making the butterfat test through a series of six questions. Answers to the questions form the text material which is very well illustrated.

Testing Milk for Butterfat (Slidefilm 206-65). 1965, \$1.15.

This is a black and white, single-frame slidefilm of 47 frames. It illustrates the steps involved in making the Babcock test for milk.

PENNSYLVANIA

Quality Milk Production. Teacher's Guide, 1964, 22 pages, \$.40, Mimeo.

For use with classes in the secondary school and adult programs. Content consists of a teacher's unit plan and six units of instruction under problem areas. A sample examination is included together with a key. Examinations may be purchased separately at five cents each or in sets of 30 for \$1.00.

_____. Student's Handbook, 1964, 83 pages, \$1.00, Offset.

TEXAS (A&M)

Milk Processing Plant Employee. Course of Study, 1967, 314 pages, \$4.50, Offset.

Designed for the student enrolled in the Agricultural Cooperative Part-time Training Program. Content consists of 11 units of instruction subdivided into 84 topics. The topic materials are organized as assignment sheets, information sheets, and topic test sheets. Answer sheets are provided for questions and problems listed on the assignment and topic test sheets. References are included.

Dairy Farm Worker. Course of Study, 1967, 224 pages,
\$4.00, Offset.

Designed for the student enrolled in the Agricultural Cooperative Part-time Training Program. Content consists of nine units of instruction subdivided into 56 topics. The topic materials are organized as assignment sheets, information sheets and topic test sheets. Answer sheets are provided for questions and problems listed on the assignment and topic test sheets. References are included.

Agricultural Products, Other: 01.0499

ALABAMA

Agricultural Products. Student's Guide, 1970, 125 pages,
\$1.00, Offset.

Prepared for specialized study in agribusiness at the 11th and 12th grades, the guide contains 21 jobs. Much of the content deals with processing farm products and the techniques of marketing.

ORNAMENTAL HORTICULTURE: 01.05

Arboriculture: 01.0501

ILLINOIS

Fertilizing and Watering Shade and Ornamental Trees. Student's Guide, 1967, 12 pages, \$.15, Offset.

The proper care of trees involves the knowledge and use of many cultural practices, including basic information on fertilization. The why and how of fertilizing trees is covered in this leaflet.

Fertilizing and Watering Shade and Ornamental Trees (Slide-film 640). 1969, \$3.05.

This is a color, single-frame slidefilm of 48 frames. It gives basic information on fertilizing and watering shade and ornamental trees. It emphasizes the establishment and maintenance of small trees. With captions.

Plant Identification--(Ornamental Horticulture Visuals). 1967, \$.90.

This is a set of 30 visual masters on leaf shapes and various characteristics for plant identification.

Plant Propagation--(Ornamental Horticulture Visuals). 1968, \$1.10.

This is a set of 39 visual masters showing the various kinds of grafting and methods of reproduction and grafting.

Pruning Shade Trees. Student's Guide, 1967, 8 pages, \$.10, Offset.

Excellent tree pruning is an art. Properly done, pruning increases the vigor of the trees, done to excess, it can cause stunting. The content of this guide is helpful in understanding the art of pruning.

Pruning and Training of Plants--(Ornamental Horticulture Visuals). 1968, \$.95.

This is a set of 32 visual masters showing various ways of pruning hedges, trees, grapes, and raspberries. It also shows various types of ways to train plants as espaliers.

Selecting Trees for Home Planting. Student's Guide, 1967, 40 pages, \$.50, Offset.

The well-illustrated content of the guide helps the student to identify factors to consider when buying trees, and the care needed in selection of the right species to accomplish given results.

Transplanting Shade Trees. Student's Guide, 1967, 12 pages, \$.15, Offset.

Content provides help in preparing trees for moving, planting, and protecting trees that have been transplanted.

Floriculture: 01.0502

ILLINOIS

Buying Bedding Plants. Student's Guide, 1969, 20 pages, \$.25, Offset.

This helpful booklet answers such questions as whether to buy plants or grow your own, what varieties to select, and how to care for bedding plants.

Foliage Plant Identification. Part I. Practice Set (Slide-film 610 Supp.). 1969, \$2.75.

This is a color, single-frame slidefilm of 39 frames. It presents a set of pictures of foliage plants. For use in practice work in teaching students to identify plants. It supplements the filmstrip entitled "Foliage Plant Identification," Part I.

_____. Part II. Practice Set (Filmstrip 611 Supp.).
1969, \$2.75.

This is a color, single-frame slidefilm of 39 frames. It presents a set of pictures of foliage plants. For use in practice work in teaching students to identify plants. It supplements the filmstrip entitled "Foliage Plant Identification," Part II.

_____. Part I. (Slidefilm 610). 1969, \$3.10.

This color, single-frame slidefilm of 49 frames shows 30 foliage plants which are commonly found in the home. It includes common and scientific names, descriptive information, use, and code indicating ideal growing conditions.

_____. Part II. (Slidefilm 611). 1969, \$3.10.

This is a color, single-frame slidefilm of 49 frames. It shows 30 foliage plants which are commonly found in the home. It includes common and scientific names, descriptive information, use, and code indicating ideal growing conditions.

_____. Part III (Slidefilm 612). 1970, \$3.25.

This color, single-frame slidefilm of 55 frames shows 30 foliage plants which are commonly found in the home. It includes common and scientific names, descriptive information, use, and code indicating ideal growing conditions. With captions.

Garden Flowers: Annual, Part I (Slidefilm 601). 1969,
\$3.10.

This is a color, single-frame slidefilm of 50 frames. It illustrates common annuals, giving their scientific names, normal height range, uses, and flower colors.

_____. Part II (Slidefilm 602). 1970, \$3.10.

This color, single-frame slidefilm of 50 frames illustrates common annuals, giving their scientific names, normal height range, uses, and flower colors.

Poinsettias--Care and Propagation. Student's Guide, 1970,
8 pages, \$.10, Offset.

The care of Christmas poinsettias is covered in this leaflet. The after-Christmas care and the starting of new plants are discussed in the guide as well.

Practice Set for Foliage Plant Identification (Slidefilm 612 Supp.). 1970, \$2.75.

This is a color, single-frame slidefilm of 39 frames. It presents a set of pictures of foliage plants. It contains no script. Could be used for testing or practice work in teaching students to identify plants. It supplements the filmstrip entitled "Foliage Plant Identification," Part III.

Producing Poinsettias Commercially. Student's Guide, 1970, 12 pages, \$.15, Offset.

Because poinsettias are the major potted plants grown for Christmas they have tremendous economic importance. The varieties, planting practices, and similar topics for success in growing these plants are covered in the text material.

MICHIGAN (O.M.)

Florist Sales and Service. Unit 14. Student's Manual, 1969, 47 pages, \$.75, Offset.

A retail florist must be a salesman, merchandiser, and a good businessman. This unit helps the student understand the work of the retail salesman in the florist shop. It points out that the worker must be able to make floral arrangements, develop and set up displays, prepare advertising, and make deliveries. In addition to plant knowledge, cut-flower arrangements, and the like, the unit covers retail shop organization, including financing, record keeping, and office operations.

OHIO

Floriculture Crops. Slides, 1966, \$9.50.

A series of 60 color slides and script. The objective of this series is to introduce horticulture students to the major floriculture crops produced in this country. Individual crops are discussed as to types and varieties available, some of the specific cultural requirements, and the uses of the plants by the ultimate consumer.

Flowers for Garden Color. Slides, 1966, \$4.25.

A series of 29 color slides and script. Describes how many common flowers may be used to their best advantage in landscaping and planning.

Greenhouse Operation and Management: 01.0503

ILLINOIS

Arranging Flowers in Vases and Bowls. Student's Guide, 1969, 20 pages, \$.25, Offset.

This interesting booklet helps consider plant materials, tools used in arranging flowers, containers, flower arrangements, and how to design arrangements.

Growing Plants Indoors. Student's Guide, 1968, 12 pages, \$.15, Offset.

This guide points out that the selection of plants for indoor landscaping is dependent upon environment. You approach the problem in two ways: (1) Select the plant to suit the environment, or, (2) Change the environment to suit the plant you have selected.

Planning and Operating a Garden Center. Student's Guide, 1970, 24 pages, \$.30, Offset.

This guide describes garden centers, gives information about selecting a suitable location, provides insights into marketing strategy, and indicates the records that must be kept for successful operation of a center.

OHIO

Greenhouses and Related Structures. Slides, 1967, \$9.50.

A series of 62 color slides, the objective of which is to familiarize students with the various kinds of greenhouse structures and facilities. Divided into sections with titles as: greenhouses, uses of greenhouses, greenhouse shapes, covering materials, greenhouse heating, ventilating and cooling, and related structures.

TEXAS (A&M)

Electrical Applications for Greenhouses. Instructor's Guide, 1967, 65 pages, \$.75, Offset.

Resource material for lesson plans in greenhouse management. The content is divided into nine lessons which are subdivided into 52 topics. In addition, there is included some electrical tables, electrical diagrams, a bibliography, addresses of State Extension Services, and a list of suggested references.

Erecting and Managing the Greenhouse in the Vocational Agriculture Program. Resource Material, 1967, 29 pages, \$.50, Offset.

For reference use of students and teachers. Content is divided into 17 sections. Each section presents pertinent material concerned with the greenhouse--its erection and management.

Landscaping: 01.0504

ILLINOIS

Grounds Maintenance and Construction--(Ornamental Horticulture Visuals). 1969, \$1.05.

This set of 36 visual masters showing various layouts for plants, roads, parking, paving, walks, game layouts, stairs, fences, and walls.

OHIO

Landscaping Your Home. Teacher's Guide, 1968, 80 pages, \$1.50, Offset.

A guide for teachers who are beginning to teach in a relatively unfamiliar field. Content is divided into eight chapters into which suggested tests and student exercises are incorporated. Includes suggestions to teachers as to methods as well as to the major technical areas. Also contains a bibliography.

SOUTH CAROLINA

Landscaping the Home and School Grounds. Teacher's Guide, 1970, 82 pages, \$1.25, Offset.

Improving the home and school grounds is an area of instruction in which a majority of the students can participate. The guide contains five sections including planning for landscape improvement, plant propagation, establishing shrubs, maintaining shrubs, and the establishment and maintenance of lawns.

Transparencies. Teacher's Resource, 1970, 40 transparencies and paper copies, \$5.00, Offset. *

The transparencies in this set are designed for use with the teacher's guide dealing with landscaping. The paper copies are useful in preparing worksheets, tests, bulletin board materials and the like.

* Note: All transparencies are unframed and printed on the offset press on 8 $\frac{1}{2}$ x11-inch three Mil Trycote, a Dow Chemical Company clear plastic product.

Turf Management: 01.0506

ILLINOIS

Establishing a Lawn. Student's Guide, 1969, 8 pages,
\$.10, Offset.

Discussed in this guide are such areas of lawn care as preparation of the soil, grasses, seeding practices, care in establishing a lawn, and some others.

OHIO

Lawn Care and Management. Slides, 1969, \$7.50.

A series of 46 color slides with script covering the following areas of lawn management: seed selection, seeding, fertilizing, mowing, weed control, disease control, watering, and thatch control. May be used with teacher's guide "Establishment and Maintenance of Lawns."

Ornamental Horticulture, Other: 01.0599

ALABAMA

Ornamental Horticulture for Vocational Agriculture in Alabama. Student's Guide, 1970, 349 pages, \$2.50, Mimeo.

This reference is for the student who wants to study ornamental horticulture and for the teacher who wants to teach it. There are 11 major divisions within the text dealing with such areas as identifying plants, plant propagation, floral crop production, nursing plant production, merchandising plants and supplies, and lawn and turf care.

INDIANA

Vocational Horticulture. Instructor's Guide, 1967, 43 pages, \$.75, Offset.

This guide is designed as a core of suggested lesson plans for a vocational horticulture program. It is divided into eight basic teaching modules: opportunities; identifying plants; propagation; control of plant environmental factors; plant processes; growth stimulating substances; and organizing records and equipment.

_____. Nurseries. 1967, 47 pages, \$.75, Offset.

Organized into four basic teaching modules: nursery business operation; propagation; harvesting, packing and marketing; and planting and growing of nursery stock.

_____. Greenhouse. 1967, 44 pages, \$.75, Offset.

Organized into nine basic teaching modules; occupational opportunities; facilities; growing medias; environment pests; diseases; plant propagating; producing quality crops; and record keeping.

_____. Turf. 1967, 42 pages, \$.75, Offset.

Organized into five basic teaching modules; opportunities; preparing turf site; establishing turf and lawns; maintaining turf and lawns; operation and maintenance of turf equipment; and human relations.

_____. Landscaping. 1967, 52 pages, \$.75, Offset.

Organized into six basic teaching modules; opportunities; developing a landscape plan; selecting plant materials; ornamental trees, shrubs, and flowers; landscaping equipment; and care and management of landscape plant.

NEW MEXICO

A Suggested Course of Study for Vocational Horticultural Occupation in New Mexico. Course Outline, 1970, 13 pages, Free, Mimeo.

Contains a suggested three-year course outline for preparing secondary students for general employment in ornamental horticulture.

NEW YORK

Ornamental Horticulture. Teacher's Guide, 1968, 63 pages, \$.50, Offset.

This guide for planning and organizing an occupational program in ornamental horticulture includes information about the production and distribution of plants used to decorate both indoors and outdoors. It deals with flowers, bulbs, shrubs, ornamental trees, lawn grasses, house plants and many more. Helpful suggestions are also given in planning facilities, selecting equipment, and in choosing instructional materials.

OHIO

What is Horticulture? Slides, 1966, \$6.00.

A series of 40 color slides and script. The major subject matter offerings in horticulture are described. Student school activities and job opportunities are considered.

TEXAS (A&M)

Ornamental Horticulture Occupations. Course of Study,
1967, 363 pages, \$4.50, Offset.

Designed for students enrolled in the Agricultural Cooperative Part-time Training Program. Content consists of 12 units of instruction subdivided into 81 topics. The topic materials are organized as assignment sheets, information sheets and topic test sheets. Answer sheets are provided for questions and problems listed on the assignment and topic test sheets. References are included.

AGRICULTURAL RESOURCES: 01.06

Forests: 01.0601

MICHIGAN (DVE)

Source Units for Plant Science. Instructor's Guide, 1967,
49 pages, \$1.50, Mimeo.

Content consists of ten units of instruction and a bibliography. The material in each unit is organized under the following headings: subject matter outline, principles, objectives, and questions and problems for students.

Soil: 01.0603

ILLINOIS

Collecting and Preparing Soil Samples for Testing (Slide-film 703-64). 1964, \$.95.

This is a black and white, single-frame slidefilm of 31 frames. It lists the equipment needed for taking soil samples and explains how to take samples and prepare them for testing.

Determining Available Potassium in Soils. Student's Guide,
1970, 12 pages, \$.15, Offset.

The content includes information on the equipment and supplies needed, the techniques used in making tests and suggestions for recording the results of potassium testing.

Nitrates in Water Supplies, Field Crops, and Ruminant Nutrition. Student's Guide, 1970, 12 pages, \$.15, Offset.

The content deals with nitrates. It covers such topics as nitrate lost in water, ways plants take in nitrates, reducing the danger of nitrates, safety in well water, and water supply protection.

Planning the Nitrogen Program. Student's Guide, 1969, 16
pages, \$.20, Offset.

This guide answers such questions as, how much nitrogen should be applied per acre, which fertilizers are cheapest to buy, when should nitrogen be applied, and the like.

Soil Color (Slidefilm 708). 1964, \$3.00.

This color, single-frame slidefilm of 47 frames discusses how soil color helps to determine how to use and manage different soil types. Considers native vegetation, drainage, amount of organic matter, and other factors that affect soil color. With captions.

Testing Soil for Phosphorus. Student's Guide, 1969, 16 pages, \$.20, Offset.

Contents of the guide approach the subject from the point of view of the equipment and supplies needed for testing, how to make soil tests, and how to record the results.

LOUISIANA

Soil Judging for Louisiana Future Farmers of America. Handbook, 1967, 33 pages, \$2.00, Offset.

The objective is to teach and promote a better understanding of soils and their best use. Content includes information about soil and its development, characteristics of soil judging and the rules for judging.

MISSISSIPPI

A Reference Unit on Basic Principles of Soil Science. Instructor's Guide, 1965, 63 pages, \$1.00, Offset.

The manual is designed to provide teachers and students with a comprehensive view of the basic principles of soil science. It contains ten units on the various principles of science of soil including erosion and drainage.

NORTH DAKOTA (NDSB)

Land Judging for High School Youth. Teacher's Manual, 1970, 21 pages, Free, Mimeo.

This revision of an earlier publication deals with land judging. The new manual contains much information on how to set up and conduct a contest. Helpful inclusions are a land judging score card and recommended land treatment measures.

NORTH DAKOTA (NDSU)

Soil and Water Engineering. Teacher's Guide, 1966, 19 pages, \$.25, Mimeo.

This guide includes elementary soil and water engineering for use in teaching conservation in agriculture. There

are included in it a number of illustrations and the content encompasses, among other things, the use of surveying instruments.

OHIO

Know Your Land. Slides, 1967, \$6.75.

A series of 44 color slides and script based upon the score card used in the Ohio Land Judging Contest.

PENNSYLVANIA

An Adaptation of the U.S.D.A. Soil Conservation Service Technical Guide. Student's Handbook, 1967, 85 pages, \$1.25, Offset.

For use with high school and adult classes. The content is divided into three sections and is applied to the problems of soils and their uses in Pennsylvania. Contains numerous tables and a bibliography.

Wildlife: 01.0604

MICHIGAN (DVE)

Source Units in Animal Science. Instructor's Guide, 1968, 55 pages, \$1.50, Mimeo.

Content consists of nine units of instruction and a bibliography. The material in each unit is organized under the following headings: subject matter outline, principles, objectives, questions and problems for students, and suggested activities for students.

TEXAS (A&M)

Deer and Turkey Management. Instructor's Guide, 1967, 38 pages, \$.50, Offset.

A resource unit for reference in teaching students in vocational agricultural courses. The content consists largely of information material supplemented with lesson plans, selected references and sources of additional information.

Fish: 01.0607

MISSISSIPPI

Catfish Farming. Teacher's Guide, 1971, 103 pages, \$2.00, Offset.

Designed for use by the secondary teacher, the guide is written so that a knowledge of fishery biology will not be required. Students may also use the publication in organized classes. In addition to an introduction, the content is divided into 11 jobs having such titles as determining the possibilities of catfish farming, constructing ponds, growing food catfish, harvesting, marketing and processing fish products.

Agricultural Resources, Other: 01.0699

ILLINOIS

Inventory Your Resources for Farm Planning. Student's Guide, 1964, 12 pages, \$.15, Offset.

An inventory of farm resources is very important for planning and accounting purposes. This leaflet contains much valuable information on how to make your resources inventory.

NEW MEXICO

A Suggested Teaching Procedure for Instruction of Careers in Agricultural Occupations. Instructor's Guide, 1966, 24 pages, Free, Mimeo.

The content is arranged in outline form divided into three areas or topics. Topic titles are: Introduction and motivation, Getting Familiar with Occupational Opportunities in Agriculture, and Planning for an Occupation in Agriculture.

NEW YORK

Conservation. Teacher's Guide, 1968, 42 pages, \$.50, Offset.

This guide for planning and organizing occupational programs was prepared to assist educators in developing courses in conservation. The content is readily adaptable to local needs and contains helpful material on such subjects as, forestry, wildlife management, soil and water management, conservation mechanics, leadership development, and many more. There are suggestions for planning the facilities and securing needed equipment. Instructional material selection is also treated in the publication.

NORTH DAKOTA (NDSU)

Books and Reference Material--Mimeo #34. Instructor's Guide, 1968, 22 pages, \$.45, Mimeo.

A guide to selected texts and reference materials. Prices and sources are listed.

Suggested Films--Mimeo #F-1. Instructional Aid Guide, 1968, 28 pages, \$.45, Mimeo.

A guide to selected films, together with sources for use in vocational agriculture classes.

AGRICULTURE, OTHER: 01.99

ILLINOIS

Applying for a Job (Slidefilm 390). 1971, \$3.25.

This 54-frame slidefilm, in color, illustrates the following aspects of applying for a job: Deciding on the Kind of Job; Taking a Personal Inventory; Getting Additional Training; Finding Out What Jobs are Available; Writing a Letter of Application; and Interviewing With a Prospective Employer.

A Guide to Parliamentary Practices (Revised). Student's Guide, 1969, 44 pages, \$.35, Offset.

The guide is a condensed version of parliamentary procedure aimed at high school level students. It contains much helpful information from obtaining the floor through all the rules of order at a glance.

MICHIGAN (O.M.)

Guidelines for Individualizing Instruction in Agriculture. Teacher's Manual, 1970, 43 pages, \$.75, Offset.

This publication is intended to serve as a guide for planning instruction which will meet the needs of the various individuals enrolled in the same class or program. Part I describes individualized instruction, Part II provides five steps in developing individualized instruction, and Part III contains an overview and synthesis which tends to put the guidelines into perspective. There is also a helpful, selected bibliography of more than 20 items relating to the individualizing of instruction.

MICHIGAN (DVE)

Coordinating Experience Programs in Agriculture Education. Teacher's Guide, 1968, 25 pages, Free, Offset.

A State publication No. 552 (Revised) to aid teachers, school administrators and others in planning and conducting a cooperative work experience program for students in vocational agriculture.

A Guide for Preparing Courses of Instruction in Vocational Agriculture in Michigan. Course Guide, 1970, 19 pages, Free, Mimeo.

A State publication No. 2151 prepared to assist teachers of vocational agriculture in developing courses of instruction designed to meet the needs of persons preparing for gainful employment in the broad field of agriculture.

NEW MEXICO

Chapter Officer's Handbook. Student's Guide, 1967, 15 pages, Free, Mimeo.

This handbook contains pertinent information concerning the duties and responsibilities of a student chapter officer in the New Mexico Association of F.F.A.

My Guide for Advancing in the Future Farmers of America Organization. Student's Guide, 1966, 12 pages, Free, Mimeo.

Contains pertinent information for the student to encourage his active interest and participation in the F.F.A.

A Guide for Teaching F.F.A. Teacher's Guide, 1967, 36 pages, Free, Mimeo.

Contains information under ten areas or topics for guidance in teaching F.F.A. Topic headings are: Introduction, History, Emblem, Colors and Motto, Aims and Purposes, Creed, Membership Degrees, Planning and Developing Program of Activities, Duties and Responsibilities of Chapter Officers, and Activities Sponsored by the F.F.A.

A Guide for Teaching F.F.A. Farming Programs in New Mexico. Instructor's Guide, 1967, 43 pages, Free, Mimeo.

Contains information under 11 areas or topics for guidance in teaching a F.F.A. farming program. Topic titles: Introduction and Orientation, Purpose of Farming Programs, Selecting a Farming Program, Making Enterprise Plans, Using Farm Agreement or Lease, Making Enterprise Budget Estimates, Making an Inventory, Keeping Record of Income and Expenses, Computing Financial Summary, Calculating Cost of Production, and Making a Financial Statement.

Manual for Operation of Agricultural Education Programs. Supervisor's Manual, 1971, 7 pages, Free, Mimeo.

Designed for use as a guide for agricultural education supervisors in New Mexico. Lists agricultural forms and reports and available materials for use in teaching agricultural subjects.

New Mexico F.F.A. Awards and Contests. Instructor's Guide, 1971, 10 pages, Free, Mimeo.

This booklet explains in some detail the awards and contests which are an integral part of the F.F.A. program.

State Officer's Handbook. Student's Guide, 1967, 20 pages, Free, Mimeo.

This handbook contains pertinent information concerning the duties and responsibilities of a student state officer in the New Mexico Association of F.F.A.

A Suggested Course of Study for Agriculture Education in New Mexico High Schools. Suggested Course of Study, 1967, 287 pages, Free, Mimeo.

This is a four-year suggested course of study for agriculture students, consisting of seven separate publications. It is broken down into six major areas covering leadership, supervised work experiences, agriculture mechanic, crop and livestock, soil and water management, and business management. The major areas are further divided into small units and minimum number of hours required per unit is indicated. Many of the units contain suggested references and visual aids.

A suggested Course of Study for Agricultural Work-Experience Program in New Mexico. Course Outline, 1970, 12 pages, Free, Mimeo.

Contains a suggested course outline for use in an agricultural work-experience program.

Transparency Masters for Vocational Agriculture: Supplement I, II, III. Teacher's Resource, 1964, Free, Mimeo.

An aid helpful in presenting the content of the vocational agriculture course.

NEW YORK

Agricultural Business. Teacher's Guide, 1967, 46 pages, \$.50, Offset.

There is a strong demand for well-trained persons in a wide variety of occupations related to agriculture. This guide covers areas such as merchandising, agricultural salesmanship, internal agricultural business record keeping, products, services, and marketing information, employer-employee relations, and similar topics.

Leadership Training Manual. Teacher's Resource, 1968, 150 pages, \$1.00, Offset. (Cooperative Training).

The manual presents concise information which will enable members of F.F.A. chapters and their advisors to plan and conduct effective F.F.A. meetings.

OKLAHOMA

Appraisal and Sources of Selected References and Resources.
Teacher's Resource, 1970, 19 pages, \$.50, Xerox.

An evaluation of a variety of resources intended for use in teaching agricultural occupations or for use in familiarizing persons with this occupational area. Material reviewed and evaluated included movies, filmstrips, slides, textbooks, pamphlets, brochures, leaflets, and the like.

Additionally, the resource contains factual material on the nature and scope of agricultural employment.

Vocational Agriculture I. Curriculum Guide, 1970, 256 pages, \$10.00, Offset.

The guide is designed to assist teachers in improving instruction in Vocational Agriculture. The content covers: Careers and Orientation; Leadership; Supervised Farm Training; Animal Science; Plant and Soil Science; and Agriculture Mechanics. The material to be covered is expected to consume 60% of the available budgeted time leaving 40% of the time for the instructor to meet the demands of agriculture in the community or area as he interprets them.

OREGON

Agriculture. Curriculum Guide, 1970, 151 pages, \$2.50, Offset.

Areas of instruction include animal science, soil science, plant science, agricultural mechanics, agricultural business management, leadership and personal development. Content is organized as a cluster of occupations providing students with options upon completing the course.

PENNSYLVANIA

Controls for Automation in Agriculture. Teacher's Guide, 1967, 73 pages, \$1.00, Offset.

Teacher's Unit Plan for use with secondary and adult classes. Content lists eight units of instruction identified as problem areas. It includes suggested equipment list and sources, diagrams for use with the laboratory manual, an examination, and answer sheets, a reference list, and transparency master sheets.

_____. Student's Handbook, 1967, 90 pages, \$1.25, Offset.

A resource manual with content divided into eight chapters corresponding with the units of instruction in the teacher's unit plan.

. Student's Laboratory Manual, 1967, 34 pages,
\$.50, Offset.

Content consists of 21 exercises under five unit headings for use in learning the application of principles presented in the student's handbook.

Equipment, Supplies, and Reference Materials for an Automatic Controls Teaching Unit. Instructor's Guide, 1967, 6 pages, \$.25, Offset.

For high school vocational agriculture classes. Resource material for use in preparing a unit of instruction. Illustrated.

Planning for a Career in Agriculture. Teacher's Guide, 1967, 16 pages, \$.40, Mimeo.

A unit plan for reference of guidance counselors and agriculture teachers in preparing a teaching unit in career planning for ninth and tenth grade students enrolled in high school agriculture classes.

 . Student's Resource Unit, 1967, 159 pages, \$2.00, Offset.

Reference material for use in a study of occupations in agriculture. Content is divided as Part 1 - Problem Areas, Part 2 - Selected Agriculture Occupation Briefs, and Part 3 - Agricultural Occupation titles.

PUERTO RICO

Specialized Agriculture Schools of Post-secondary Level in Puerto Rico. (Available in Spanish or in English). Teacher's Resource, 1970, 12 pages, Free, Mimeo.

Content covers such topics as characteristics of enrollees, areas of specialization, objectives, guidance and selection of applicants, physical facilities, courses of study and the like.

NOTE: Publications marked (Cooperative Training) in the title or supportive statement are designed for use in cooperative education programs.

OCCUPATIONAL RESOURCE MATERIAL

Materials that follow are general in nature, apply to all vocational areas, and are listed under the headings of Administrator's Resource, Student's Resource or Teacher's Resource. The Teacher's Resource material may prove helpful to Supervisors and Administrators as well.

ADMINISTRATOR'S RESOURCE

MICHIGAN (DVE)

A Guide to Establishing Vocational-Technical Advisory Committees. Administrator's Guide, 1968, 7 pages, Free, Offset.

The publication offers assistance to local schools in the formation and use of advisory committees. Excellence in vocational education requires the best efforts of educators, businessmen, industry, labor, and the public. Advisory committees are an essential part of sound Vocational-Technical Education. This booklet provides many helpful guidelines on how to establish and work successfully with advisory groups.

WYOMING

Follow-up Procedure for Post-Secondary Vocational-Technical Graduates. Supervisor's Manual, 1967, 11 pages, Free, Offset.

The booklet offers local administrators a workable follow-up procedure involving minimum outlay in time and money. It provides basic information to complete USOE forms dealing with graduates and dropouts. Single copies available so long as the supply lasts.

STUDENT'S RESOURCE

ALABAMA

Applying for a Job. Student's Workbook, 1966, 21 pages, \$.40, Offset.

Programmed material designed for students who are educationally handicapped. This lesson booklet is for the purpose of helping the student learn how to prepare himself to look for a job and how to conduct himself at a job interview. An answer book, a pre-test and a post-test are included.

Good Job Habits. Student's Workbook, 1966, 29 pages, \$.40, Offset.

Programmed material designed for students who are educationally handicapped. This lesson booklet is for the purpose of

helping the student learn how to be a good employee by doing a good job, being dependable and getting along with his supervisor. An answer book, a pre-test and a post-test are included.

How to Make \$50,000. Student's Workbook, 1966, 9 pages, \$.35, Offset.

Programmed material designed for students who are educationally handicapped. This lesson booklet is for the purpose of helping the student learn about the value to the individual in continuing his education at least to completion of high school. The money value of education is stressed. Illustrated. A series of questions are included.

Introduction to Credit. Student's Workbook, 1966, 25 pages, \$.45, Offset.

Programmed material designed for students who are educationally handicapped. This lesson booklet is for the purpose of helping the student learn about buying on credit or "charging" purchases. Five of the most widely-used credit plans are discussed. An answer book, a pre-test and a post-test are included.

Introduction to Table Manners. Student's Workbook, 1966, 33 pages, \$.50, Offset.

Programmed material designed for students who are educationally handicapped. This lesson booklet is for the purpose of helping the student learn about table manners and the details concerned with eating a meal with others, making it a pleasant occasion. Illustrated. An answer book, a pre-test and a post-test are included.

Introductions. Student's Workbook, 1966, 14 pages, \$.40, Offset.

This is a unit in a course in social skills. It provides information and training in how to introduce oneself to others and how to introduce two or more people to each other.

ILLINOIS

Applying for a Job. Student's Guide, 1969, 12 pages, \$.15, Offset.

Many questions confronting students are answered in this leaflet. It deals with such items as taking personal inventory, getting additional training, finding out what jobs are available, writing a letter of application, and being interviewed by a prospective employer.

Capitalism, Socialism, and Communism. Student's Guide, 1964, 12 pages, \$.15, Offset.

This leaflet deals frankly with the forms of government. It points out that there are two basic types of government in the world today: (1) popular governments, and (2) dictatorial governments. In any country where the people are really free, there is always open, organized, aggressive opposition to the group or party in power.

NEW JERSEY

When You Go to Work. Student's Manual, 1968, 200 pages, \$2.00, Offset.

A very basic book designed primarily for the needle trades, to prepare students with limited vocabulary for the world of work. Each concept is humorously illustrated. There is a vocabulary section at the beginning of each lesson. The six unit headings are: The Factory, A Good Worker, The Job, Shop Mathematics, Clothing for Women and Clothing for Men.

PUERTO RICO

Occupational Orientation Leaflets. (In Spanish)

The leaflets contain information helpful in orienting a student to the nature of the occupation, the preparation required to enter, salary considerations and the opportunities that exist in the field under consideration. Prepared for student's use.

The Actuary. 1969, 5 pages, Free, Printed.

The Oceanographer. 1969, 6 pages, Free, Printed.

The Physician. 1968, 12 pages, Free, Printed.

The Physicist. 1969, 7 pages, Free, Printed.

The Geologist. 1969, 5 pages, Free, Printed.

SOUTH CAROLINA

Locating and Securing a Job. Student's Manual, 1970, 29 pages, \$.50, Printed.

The manual was prepared for high school students enrolled in Vocational Education courses. Addressed to the student, the manual takes him through a series of seven steps in securing a job. There are assignments and helpful illustrations which provide opportunity for the application of the ideas set forth in the text material.

TEACHER'S RESOURCE

ALABAMA

Alabama Course of Study - Volume I. Teacher's Guide, 1964,
482 pages, Free, Offset.

A State course of study, covering the work in Grades 7 through 12, in the following fields: English, Social Studies, Health and Physical Education, Mathematics, Science, Foreign Languages, Business Education, Fine Arts, Counseling Services, and Educational Television.

CONNECTICUT

Current World Affairs. Course Outline, 1967 (Revision),
85 pages, Free, Mimeo.

The course outline is designed for use in a 10-grade social studies course. Topics covered include The United Nations, Asia (including the Middle East), Africa, Europe, USSR and Latin America.

English Grammar Outlines - Grades IX to XII. Teacher's Guide,
1967, 53 pages, Free, Mimeo.

The aim of the program is to meet the needs of the students in order to improve their powers of communication and to assist them to become critically perceptive of themselves and others through a reading program geared to their needs and interests. Content includes vocabulary, sentence structure, oral communication, written expression and the like.

Modern Media for Vocational Technical Education. Education
Resource, 1967, 43 pages, Free, Mimeo.

The bulletin contains summaries on various educational medias that are being utilized in vocational-technical training programs. It describes such medias as programmed instructions, instructional television, and the like. It also contains conclusions, recommendations and a bibliography.

Outline for Related Science - Grade 10. Teacher's Guide,
1967, 98 pages, Free, Mimeo.

Subject matter for this 10-grade course has been drawn from the physical sciences. In addition to setting forth principles, the outline provides teaching suggestions and trade applications helpful to the vocational teacher.

Outline for Related Science - Grade 11. Teacher's Guide,
1967, 28 pages, Free, Mimeo.

Content includes a skeleton outline of the course, teaching suggestions and aids, trade applications, a lesson plan format and many more helpful ideas useful in teaching the course.

Outline for Related Science - Grade 12. Teacher's Guide, 1966, 11 pages, Mimeo.

Provides an outline covering related science in the areas of materials, processes and testing.

INDIANA

Procedure for Establishing Area Vocational Schools. Guidelines, 1967, \$.40, Offset.

Procedures and guidelines outlined constitute the instructions for implementing the establishment of area vocational school districts.

KANSAS

Principles and Philosophy of Vocational Education. Teacher's Manual, 1967, 105 pages, \$2.50, Offset.

The content is helpful in understanding the principles of vocational education. Topics covered include the role of vocational education, types of students, vocational instruction, review of the Federal Vocational Acts and similar items.

NEW JERSEY

Student's Manual for Supervised Teaching of Vocational Subjects. Student's Manual, 1970, 63 pages, \$2.00, Offset.

A manual prepared specifically for trainees enrolled in the course entitled, "Supervised Teaching of Vocational Subjects." Responsibilities and requirements of teaching vocational subjects are stressed in the publication.

NEW MEXICO

Personal Growth Curriculum for Adult Basic Education. Curriculum Guide, 1970, 157 pages, Free, Offset.

Content is designed to not only provide skill development in mathematics, reading, and writing, but also to develop a new life perspective, and an awareness of family and social responsibilities. It is intended to lift attitudes from defeatism and rejection to those of confidence and leadership.

The guide contains six major divisions including: Introduction, Family Life, Health Education, World of Work, Money Management, and Citizen Government.

Pre-Vocational Orientation in Vocational Education for Junior High Schools in New Mexico. Instructor's and Counselor's Guide, 1967, 125 pages, Free, Offset.

Designed as a source of occupational information relevant to opportunities in vocational education, which are appropriate for use with junior high school students in New Mexico. It also contains a film list and bibliography.

OKLAHOMA

Career Exploration. Teacher's Guide, 1970, 101 pages, \$1.50, Offset.

The guide is designed for use by teachers in planning and implementing a course in the exploration of careers. Content is geared to the 8, 9, or 10-grade levels. A group of creative ideas and recommendations has been brought together in this publication to help the teacher plan a practical course designed to fit the needs of students to meet the challenges of the future. The four units include such topics as: Know Yourself; World of Work; Use of Occupational Information; and, Career Educational Planning.

SOUTH CAROLINA

Low-Cost Teacher Made Overhead Transparencies. Teacher's Manual, 1969, 63 pages, \$1.00, Printed.

This printed, well-illustrated booklet contains a thorough discussion of the merits and potential of one material that can be used in the production of overhead transparencies. The material, known as three Mil Trycite, has been selected because it is economical, versatile, very transparent, and can be obtained in a pre-cut size useful in teaching. It can be utilized without expensive equipment of processing materials. The publication provides the, "How to do it" of transparency production in excellent detail.

TENNESSEE

Vocational Related Training for Special Students. Curriculum Guide, 1968, 174 pages, \$4.50, Offset.

A guide designed to help the teacher working with the potential high school dropout, slow learner, disadvantaged, culturally deprived, or the nonachiever. It provides the teacher with an ideal opportunity to extend his creativity and to introduce practical education for living. Suggested instructional units include such areas as: getting along with others, the job interview, business and commercial forms, the pay check, community life, and many others.

TEXAS (A&M UNIV.EES)

Information and Format for Designing Objective, Essay, and Performance Type Tests. Teacher's Guide, 1970, 81 pages, \$1.75, Offset.

The guide is designed to assist vocational teachers in developing valid, reliable and comprehensive tests. There is much general information about tests and a variety of objective type tests are reviewed. Examples of various tests give the teacher an insight into the types and their development.

WYOMING

- Wyoming Mathematics Curriculum Guide - Grades 7-12. Teacher's Manual, 1970, 34 pages, Free, Printed.

Through the program of mathematics the student should become aware of the power and influences of a command of figures in his continuing occupational and personal development. The content can be summarized as an attempt to: (1) emphasize the "why" just as much as the "how", (2) teach mathematics as a structure, (3) allow students to discover relationships for themselves whenever possible, and (4) teach the social utility, or practical applications of mathematics and of arithmetic computation.

INSTRUCTIONS FOR ORDERING
AGRICULTURE CURRICULUM MATERIALS

Orders for materials should be sent to the address of the appropriate State source. Specific ordering information is indicated where applicable. Prices are subject to change without notice. (An asterisk indicates that whether or not items are listed in this publication, a list of instructional materials from that source is available upon request.)

ALABAMA

For vocational agriculture publications:

Single copies are available from: Supervision Vocational Agriculture, Attention: A. H. Halcomb, Subject Matter Specialist, 101 Petrie Hall, Auburn, Alabama 36830.

Make check payable to: Supervision Vocational Agriculture, and mail to above address with order. Invoices will be sent for orders received on purchase orders or official letterheads if requested.

For vocational education publications:

Instructional Materials Unit, Vocational Industrial Education Department, P.O. Box 2847, University, Alabama 35486. Check in amount of order made payable to the University of Alabama must accompany order. Publications are sent postpaid.

CALIFORNIA*

A catalog with instructions on how to obtain materials is available upon request from: Vocational Education Productions, California State Polytechnic College, San Luis Obispo, California 93401.

CONNECTICUT

Curriculum Center, Division of Vocational Education, State Office Building, Room 336, Hartford, Connecticut 06115. Publications are free and sent postpaid. Request must be made on official school system stationery.

ILLINOIS

Vocational Agriculture Service, University of Illinois, 434 Mumford Hall, Urbana, Illinois 61801.

Terms of sale for ordering purpose are:

1. Items are sent postpaid at prices listed when payment accompanies the order.
2. Postage charges are added to these prices when we bill.
3. Orders are sent on account without question on school purchase orders or on school stationery signed by responsible school official.
4. Payment should accompany orders from individuals unless prior arrangements have been made.
5. Catalog and special order forms available without charge on request.

INDIANA

Vocational Resource Center, Department of Vocational and Technical Education, Indiana State University, Terre Haute, Indiana 47809. Check or money order in amount of order made payable to the Vocational Resource Center, Indiana State University, and must accompany order. Publications are sent postpaid.

KANSAS

Dr. K. E. Hoffman, The Coordinator of Vocational Education, Division of Business and Business Education, Kansas State Teachers Collete, Emporia, Kansas 66801.

LOUISIANA

State Department of Education, Baton Rouge, Louisiana 70804. Orders accepted for single copies only. Orders must be on official stationery or purchase order form.

MICHIGAN

For all (DVE) publications:

Mr. Robert Batterbee, Chief, Printing and Mailing Section, Department Services Division, Department of Education, P.O. Box 420, Lansing, Michigan 48902. Single copies are available free.

For all (OM) publications:

Mr. William Lasher, 808 Wiltshire Drive, Owosso, Michigan 48867.

MINNESOTA*

Department of Agricultural Engineering and Agricultural Education, Institute of Agriculture, St. Paul, Minnesota 55101.

MISSISSIPPI

Mississippi State University, Curriculum Coordinating Unit for Vocational-Technical Education, Agriculture Section, P.O. Drawer DX, State College, Mississippi 39762.

MISSOURI

Instructional Material Laboratory, Department of Practical Arts and Vocational-Technical Education, University of Missouri, Columbia, Missouri 65201. Catalog available upon request. Billing will accompany shipment of requested materials. Check in amount of order made payable to the University of Missouri, should be mailed to the University Cashier's Office, 123 Jesse Hall, Columbia, Missouri 65201.

NEW JERSEY

Curriculum Laboratory, Department of Vocational-Technical Education, Graduate School of Education, Rutgers -- The State University, 10 Seminary Place, New Brunswick, New Jersey 08903. School orders must be made on official school purchase order form. In addition to price of materials, you will be billed for postage and shipping charges.

Individuals may order materials by including a check or postal money order for the amount of the materials plus 10 cents per book postage. Checks made payable to the New Jersey Department of Education, Vocational Education Division.

NEW MEXICO

It is the general practice in this State to send a copy of all new material to each State Supervisor and Head Teacher. Each representing the area of service in which the material was developed. Others may obtain copies of the listed material by addressing the appropriate State Supervisor.

For Supervisors of all Vocational Divisions, address: State Supervisor, Division of Vocational Education, State Department of Education Building, Capitol Complex, Santa Fe, New Mexico 87501.

NEW YORK

The State Education Department, Bureau of Finance, Publications Distribution Unit, Albany, New York 12224. Single copies only sold to educational institutions outside the State. No "on approval" copies will be sent. Prices given are net and include book rate postage.

Orders, with remittance, should be sent to: The Publication Distribution Unit, State Education Department, Albany, New York 12224.

State Education Departments, colleges, or curriculum laboratories having similar materials to exchange should make arrangements with the Bureau of Secondary Curriculum Development, Albany, New York 12224. Copies of New York State curriculum materials are available through the microfiche services of ERIC and 3M IM Press.

NORTH DAKOTA

For NDSB publications:

State Board for Vocational Education, 900 East Boulevard, Bismark, North Dakota 58501.

For NDSU publications:

North Dakota State University, Agricultural Education Department, Fargo, North Dakota 58102. Check or money order in amount of order made payable to Teaching Aid Funds, and must accompany order.

OHIO*

Vocational Agriculture Instructional Materials Service, The Ohio State University, Room 201, 2120 Fyffe Road, Columbus, Ohio 43210. A school purchase order and check or money order must accompany all orders, and made payable to the Ohio State University. Catalog with order forms is available on request.

OKLAHOMA

The Curriculum and Instructional Materials Center, State Department of Vocational and Technical Education, 1515 West Sixth Street, Stillwater, Oklahoma 74074. Check in amount of order made payable to the Curriculum and Instructional Materials Center, and must accompany order. Publications are postpaid.

OREGON

Division of Community Colleges and Vocational Education, Oregon Board of Education, Public Service Building, Salem, Oregon 97310.

PENNSYLVANIA

The Pennsylvania State University, Department of Agriculture Education, University Park, Pennsylvania 17803. Orders totalling

less than \$10.00 must be accompanied by a check or money order made payable to The Pennsylvania State University.

PUERTO RICO

Mrs. Ana L. Reyes de Martinez, Director, Vocational and Technical Education, Research Coordinating Unit, Department of Education, P.O. Box 759, Hato Rey, Puerto Rico 00919.

SOUTH CAROLINA

Vocational Education Media Center, Clemson University, Clemson, South Carolina 29631.

With order of less than \$10.00, include payment. Orders that do not include payment should be made by official purchase requisition.

TENNESSEE

Inquiries for specific publications should be made to the Vocational Curriculum Laboratory, Box 1114, Murfreesboro, Tennessee 37130.

TEXAS

Engineering Extension Service, Texas A&M University, F.E. Drawer K, College Station, Texas 77843. A school purchase order and check or money order must accompany each order, and made payable to Texas A&M University. Catalog available. A 2 percent State sales tax or tax exemption certificate required in addition to prices listed. The usual charge for postage and handling on a single outline is 25¢.

Teaching Materials Center, College of Agriculture, Texas A&M University, College Station, Texas 77843. A school purchase order and check or money order must accompany each order, and made payable to Texas A&M University. Catalog available. A 2 percent State sales tax or tax exemption certificate required in addition to prices listed.

UTAH

Division of Vocational and Technical Education, 1400 University Club Building, Salt Lake City, Utah 84111. Check in amount of order made payable to the Utah State Board for Vocational Education, and must accompany order.

VIRGINIA*

Director of Public Information and Publications, State Department
of Education, Richmond, Virginia 23216.

WYOMING

State Department of Education, Division of Public Information,
Capitol Building, Cheyenne, Wyoming 82001.